

SCHOOL LIFE

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THE WHITE HOUSE
WASHINGTON

August 31, 1945

TO THE PATRONS, STUDENTS AND TEACHERS OF AMERICAN SCHOOLS:

After the most destructive war in human history our Nation has turned once more to the more prosaic but preferred tasks of peace and reconstruction. Those tasks are no less stupendous than those of war. They require as great a measure of intelligence and understanding and of unselfish devotion to the common good. For the building of these qualities in its citizens America looks to its schools and colleges, dedicated as they are to the development of individual competence, wisdom and good will.

It is fitting, therefore, that the week of November 11 to 17 has been set aside for observance again as American Education Week. I urge that it be an occasion this year for counseling together on how we can further strengthen and improve the schools and colleges of the Nation for their essential peacetime tasks. Let us, as parents and citizens interested in the welfare of our children and in the general welfare, visit our schools during American Education Week, learning at first hand of school needs and problems. And then let us resolve as individuals and as a people progressively to develop our schools as the basic instruments of freedom, democracy, and human betterment.

Harry Truman

See "Annual Observance," next page

SCHOOL LIFE

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Federal Security Administrator

WATSON B. MILLER

U. S. Commissioner of Education

JOHN W. STUDEBAKER

The Congress of the United States established the Office of Education in 1867 to "collect such statistics and facts as shall show the condition and progress of education in the several States and Territories"; to "diffuse such information as shall aid in the establishment and maintenance of efficient school systems"; and to "otherwise promote the cause of education throughout the country." *SCHOOL LIFE* serves toward carrying out these purposes. Its printing is approved by the Director of the Bureau of the Budget.

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Twenty-fifth Annual Observance Affords Opportunity

"Education to Promote the General Welfare"—the theme for the twenty-fifth annual observance of American Education Week, November 11-17—affords opportunity "to take before the people of your community the great educational issues of the day in your community, your State, and the Nation."

American Education Week is sponsored jointly by the National Education Association, The American Legion, The National Congress of Parents and Teachers, and the U. S. Office of Education.

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Back to School Wisdom for All Communities

"Now is the time to face the fact that education has suffered critical losses during the war. The effect of those losses can be minimized only if efforts to strengthen the school system are redoubled. Hundreds of youngsters who have learned the lure of wartime wages, as well as those who went into the armed forces without completing their education, must be encouraged to return to school. Teachers must be granted new inducements to steady service. New buildings to make up for the suspension of construction during the war years will have to be provided along with increased volumes of supplies and equipment.

"It is one thing to encroach temporarily upon education for the sake of winning the war quickly. It would be quite another thing to leave the wounds of wartime neglect unhealed. Evidence everywhere about us points to the fact that more and not less education is needed to prepare the youth of the land for the responsibilities that are coming their way. Selective Service brought to light an appalling waste of human resources for want of basic schooling. Now is the time to move against this weakness in our democratic system. And such a move will obviously entail not only getting youngsters back into the schools but also preparing the schools to give them more of the training they need."—Excerpt from *The Washington Post*, September 17, 1945.

Seventh Grade Describes "When Our Town Was Young"

An example of valuable educational experiences that young people can have when community and school work together is illustrated by a project developed in North Salem, N. Y. The boys and girls of the seventh grade in 1942-43 took as their assignment in their social-studies course responsibility for finding out everything they could about North Salem's early days.

They looked in all of the history books they could find. They learned some facts from the reference books, but as their town was only a small town, they as children in many communities in the United States found little in books about the lives of the first settlers and the other things they wished to know.

The boys and girls started asking questions of their older neighbors whose ancestors came to North Salem in the

early days. The stories they were told were written down and used for special programs and shared with their schoolmates and friends. It was suggested to them that the stories might be published.

The students worked harder than ever. Pictures were taken of landmarks visited on historical field trips. At the end of the year a booklet was printed entitled *When Our Town Was Young*. The proceeds of the venture netted a profit of \$80 which was presented to the school library. They received many fine letters from educators throughout the State. Their booklet was used in a course on curriculum adjustment in a high school. They also heard of what other schools were doing along the same line.

The seventh grade of 1943-44 collected
(Turn to page 6)

SCHOOL LIFE, November 1945

State Legislation for Exceptional Children

STATE programs for the education of exceptional children have developed rapidly in recent years. The foundation on which such programs have been built in more than 25 States has been sound State legislation authorizing local facilities, providing State aid to pay for the same, and insuring competent State supervision. The year 1945 has added to legislation already in force significant enactments in a number of States, which are described below by Elise H. Martens, Senior Specialist in the Education of Exceptional Children, U. S. Office of Education.

A high mark of achievement in State legislative action on behalf of exceptional children has been reached in the year 1945. At least three new State-wide programs of special education through day-school systems were inaugurated by law (in Maine, Oklahoma, and Texas), and at least four States (California, Illinois, Iowa, and Ohio) greatly expanded their already existing programs, which in every case are administered by the State department of education or public instruction. If the interest displayed in these seven States is any indication of what one may expect elsewhere, the educational future of hitherto neglected exceptional children—particularly the handicapped—is ultimately assured in the United States.

Texas

The purpose of Senate bill No. 38, passed this year by the Texas Legislature, is "to provide competent educational services for the exceptional children in Texas between and including the ages of six (6) and seventeen (17) for whom the regular school facilities are inadequate or not available." "Exceptional children" include "any child of educable mind whose bodily functions or members are so impaired that he cannot be safely or adequately educated in the regular classes of the public schools without the provision of special services." The "special services" may include special teaching of

any kind needed, transportation, and provision of special supplies and equipment. Children who are eligible for enrollment in the State schools for the deaf and the blind are excluded from the provisions of this act, since special education is already furnished for them.

In order to "foster, inspect, approve, and supervise" the educational program provided by the act, there is created in the State department of education a division of special education, with personnel specified as follows: director, assistant director, secretary, and stenographer. The appropriation for the salaries of these persons and for travel and contingent expenses is \$12,500 for each year of the biennium.

The sum appropriated for the operation of the program in local school districts is \$275,000 for the biennium, \$100,000 to be used the first year and \$175,000 the second. This appropriation is to be used for the excess cost (up to \$200 per year per child) of instructing exceptional children in local school districts over and above the average per capita cost of educating normal children in the respective districts. The minimum number of children specified to permit the establishment of a special class is 5. "Convalescent classes in approved treatment institutions" may also be provided.

The division of special education is the responsible agency for the approval of all such classes in either local school districts or institutions, for the preparation of courses of study and other material needed, for setting up rules and regulations for the training and qualifications of special class teachers, and for cooperating with all other State agencies concerned with handicapped children. Definite reference is made to the need of providing "counseling and guidance in social and vocational matters" and to the possibility of employing "one or more teacher-coordinators to assist in the establishment of such services," in cooperation with State agencies dealing with rehabilitation and employment.

Maine

In Maine new legislation (H. P. 417) was enacted containing provisions somewhat similar to those in the Texas act, but presenting also certain differences. As in Texas, so in Maine the educational services rendered are to be for physically handicapped children of all types who cannot be adequately taught in regular public-school classes and who are not otherwise provided for by the State. A division of special education, as in Texas, was created in the State department of education, which shall be responsible for supervising the program and for regulating courses of study, qualifications of teachers, necessary educational equipment, and other matters pertaining to the operation of the program.

The age range of children to be served in Maine is, however, broader than in Texas, all physically handicapped children between the ages of 5 and 21 years profiting by the provisions of the act. Moreover, the Maine statute, while specifying 5 as the minimum number of children to permit the establishment of a special class, permits also the use of home teachers or approved correspondence courses if there is not a sufficient number of children for a class. "The average daily attendance of pupils instructed by home teachers shall show the number of 60 minute hours devoted to such work, and 5 such hours shall constitute a school week."

The maximum excess cost to be paid by the State is \$200 per year per child attending school in his resident district. But for pupils "who must be boarded away from their home districts in order to attend a special class, or be transported from other districts," the excess cost met by the State may be not more than \$350 per school year. Children in treatment institutions may also benefit by the provisions of the act.

The appropriations made for this program include: \$5,000 for each year of the biennium for the administration of the division of special education; \$7,000 "for subsidies, scholarships, and reimbursement to local school districts" for the year 1945-46; and \$10,000 "for such educational services, equipment, and reimbursement" for the year 1946-47.

Oklahoma

The Oklahoma statute (H. B. 151) has initiated a State-wide program of special education in local school districts, without, however, providing for the establishment of a division of special education in the State department of public instruction as a guiding and administering agency. The State board of education is specified in the act as the general administrative authority for the program. There are implications in the act which might make some of its provisions apply to mentally as well as physically handicapped children, but its intent seems to be, as in Texas and Maine, to serve the physically disabled of legal school age who are unable to attend a public school maintained for normal children. Provision is made for the school census to include enumeration of all physically handicapped children.

The act is permissive, while those in Texas and Maine specify that "it shall be the duty of the school authorities" to request the proper arrangements when the number of children justifies them. The minimum number of children required in Oklahoma in order to establish special educational facilities is 6. The facilities provided may be "in schools or classrooms maintained for such purpose or in such other places, including the homes of such children, as the school board of the district may deem advisable." As in Texas and Maine, so in Oklahoma children may be transferred to another district if the home district does not have a sufficient number of handicapped children or cannot for some reason provide suitable facilities for them.

It shall be the duty of the State board of education to "prescribe the qualifications of all persons who teach physically handicapped children under the provisions of this Act," issue teaching certificates, and set up rules and regulations for the proper administration of the act. It is responsible also for the disbursement of State funds to defray the excess cost involved in providing special educational facilities up to \$100 per year for each physically handicapped child. The total appropriation set apart for this purpose is \$20,000 for each year of the biennium.

Iowa

For some years Iowa had had a program of State aid for the special education of physically handicapped children in local communities, but it had no administrative plan determined by law. The legislative session of 1945 gave tangible form to the whole program by establishing a division of special education within the State department of public instruction, the duties of which are specified in detail in the law. The groups of children to be served were expanded to include all children "under 21 years of age" who are physically defective, emotionally maladjusted, or intellectually incapable of profiting from ordinary instructional methods, exclusive of those (such as the blind, the deaf, and the feeble-minded) for whom special residential schools or institutions are provided. The specification "under 21 years of age" might indicate that the way is open in Iowa for the establishment of nursery schools for handicapped children. The annual school census, however, is required to report only handicapped children "of school age."

The Iowa law (H. F. 125), like the Oklahoma statute, is permissive. Local school districts *may* provide transportation, establish special classes, provide for special instruction in regular classes or in the home, prescribe social counseling and vocational counseling and training, and provide special facilities and equipment as a part of the school system. No minimum number of children is indicated as a requirement; neither is a maximum excess cost per child designated for reimbursement.

Presumably these matters are to be left to the division of special education, one of whose duties is "to adopt plans for suitable reimbursement, in whole or in part, of school districts for costs of carrying out programs of special instruction." Another is "to adopt plans for the establishment and maintenance of day classes, schools, home instruction, and other methods of special education for handicapped children." This division also is to establish standards for the qualifications of teachers, prescribe special curricula and methods, provide for certification of the eligibility of handicapped children by competent medical and psychological authorities, initiate the establishment of classes for

handicapped children in hospitals and convalescent homes in cooperation with the management thereof and local school districts, and cooperate with other existing agencies concerned with the welfare of handicapped children.

In order to carry out the provisions of this act, the Iowa Legislature appropriated for each year of the biennium a total amount of \$60,000. This is double the amount previously allotted in the departmental appropriations bill.

Ohio

Ohio, too, has long had a program for the special education of certain types of physically handicapped children in local day schools, in hospitals, and at home. In fact, the amount expended out of State funds for this purpose in 1943-44 amounted to more than a half million dollars. The division of special education in the State department of public instruction has administered the program which brought appropriate educational facilities to the deaf and hard of hearing, the blind and partially seeing, and to crippled children.

In 1945, the passage of Senate bill No. 65 extended the program both as to types of children served and types of services rendered. The most significant provisions are those which (1) include in the program "slow learning persons over the age of five;" and (2) permit the establishment of "child study, counseling, adjustment and special instructional services for persons over the age of five whose learning is retarded, interrupted or impaired by physical or mental handicaps."

In other words, slow-learning or mentally handicapped children, not hitherto provided for, are included in the State program; and the importance of counseling and adjustment services for all handicapped children is made a matter of record and State action. All questions relative to what constitutes a program of child study and adjustment and what its current operating costs may involve are by the law subject to the authority of the State superintendent of public instruction. State aid for such programs will be such "as the financial condition of the board of education and funds available to the superintendent of public instruction will permit."

State aid for slow-learning children is specified as "\$750 for each approved teaching unit of slow learners, which in no case shall be comprised of less than 12 pupils, plus any cost for the transportation of nonresident pupils to such classes." An additional amount of \$250 is to be paid for an approved teaching unit of such children which is "served by a teacher on circuit."

California

California is another State which for years has had an extensive program for the education of physically handicapped children. With a commission of special education constituting the supervisory force in the State department of education and with State subsidies to local school districts for the education of handicapped children amounting to more than a million dollars for the school year 1943-44, the program has served every type of physically handicapped child, whether in school, at home, or in hospital.

Yet, with all the services available, there has recently been a growing concern in California, as elsewhere, for the welfare of children suffering from cerebral palsy. This particular group of children, needing very special and very expensive care, has gone without adequate diagnosis and treatment, both medical and educational, that might make them more happily adjusted in their environmental situations. Accordingly, the California Legislature in 1945 enacted special legislation for the medical and educational care of children with cerebral palsy, with an appropriation of \$954,000 to cover the work of the biennium. As a part of the program, there will be two additional consultants in the education of physically handicapped children attached to the State department of education. The State department of public health, which is the official State agency for services to crippled children, and the State department of education will cooperate in the development of some phases of the program.

Illinois

In Illinois one finds a whole series of bills enacted on behalf of handicapped children. Here, as in Ohio and California there is already a division of special education in the State department of public instruction. Instituting

and supporting progressive measures is also the Governor's commission for handicapped children. Legislative activity has been intense and progress outstanding.

Senate bill 295 consolidates the entire State program of special education (which previously had operated under somewhat divided authority) under the general administration of the State superintendent of public instruction; it extends the minimum age for special education of *all* physically handicapped children from 5 years to 3 years; and it makes certain other improvements in the legal procedure to be followed in establishment of classes.

House bill 399 makes possible the addition of several specialists in the education of exceptional children for the staff of the State superintendent of public instruction, thus providing more consultation service to local school districts.

House bill 412 provides for the establishment of a hospital school for the care and education of severely physically handicapped but educable children. The institution as a whole is to be under the department of public welfare, but "the superintendent of public instruction shall have responsibility for supervision of the educational program offered by the hospital-school facilities to the same extent and in the same manner as he supervises the educational program of public schools in local school districts in the State."

Senate bill 333 is an administrative measure making appropriations for various purposes, including disbursements for special education. The total amount earmarked for the excess cost of the education in local school systems of (1) physically handicapped children, (2) truant, incorrigible, and delinquent children, and (3) mentally handicapped children is almost 5 million dollars.

Summary and Interpretation

These States are only 7 of the more than 25 which have on their statute books laws providing for the special education of handicapped children through day-school systems. They stand out in the legislative history of 1945 as making significant strides toward the realization of a complete program of special educational services in this field. No one would claim that the

measures passed are flawless; but that they can achieve definite and desirable aims is sure. Certain common elements characterize all the legislation enacted; certain trends become more and more apparent. Among the most significant of these are the following:

1. Without exception the programs inaugurated or expanded in 1945 are the administrative responsibility of State education departments, and in every case but one a division of special education within the State education department has been created to give competent supervisory and directive services. This is of course as it should be. Special educational programs for handicapped children in public schools, hospitals, or at home are logically the responsibility of the same State and local educational agencies that carry responsibility for the education of all other children. Moreover, if the special services are to be wisely and effectively administered throughout the State, competent guidance and supervision must be available through a division of special education responsible to the chief State school officer.

2. In every case, the excess cost of educating a handicapped child is considered a legitimate charge against the State school fund and is made the basis for special State aid to local communities. The maximum amount of excess cost allowed by the State varies, but for physically handicapped children a standard of \$200 per child for each school year appears to be gaining acceptance, with an additional allowance for transportation and boarding of nonresident pupils.

3. Most State laws relating to special education have a permissive character; that is, they authorize local school authorities to make the needed facilities available and grant therefor special State financial aid. Some *require* action if there is a given number of eligible children. The State's function in this field thus appears to be one of encouragement, leadership, general administration, advisory service, supervisory help, and financial assistance. The effectiveness of its program will be reflected in part in the extent to which local communities participate in it.

4. Increasing recognition is given to the educational needs of handicapped children confined to their homes, in hospitals, convalescent homes, and other institutions. Moreover, the severely handicapped who may need to spend most of their school days in a hospital school are also considered a part of the total population to be served. State programs of special education are beginning to reach out to

include every physically handicapped child, of whatever type or condition.

5. So also State programs previously limited to the physically handicapped are now reaching out to include the mentally and emotionally handicapped, who are equally in need of special educational facilities. No program is complete until it serves all children who have serious special problems of physical, intellectual, or emotional adjustment.

6. Increasing recognition is given to the need of an early beginning of education for handicapped children. The downward extension, by law, of the age of school entrance for the physically handicapped to include 3-year-olds is significant. Nursery school education can do much to help in the social adjustment of young handicapped children.

7. In keeping with the legal provisions for earlier school entrance is also the provision for counseling and adjustment services throughout the handicapped child's school life. All children need counseling and guidance, and the handicapped have very special adjustment problems which the school must help them to solve. The cost of the needed counseling is thus considered a legitimate expense of the special education program.

8. As the school entrance age for physically handicapped children is being extended downward by law, so the law also recognizes the need of extending special education beyond the elementary years. In every one of the 7 States considered in this article, the legal terminology used makes it clear that young people of high-school age may be served by the program.

9. There is growing recognition of the need of qualified personnel. Hence teacher-training facilities are becoming more and more a part of the program of special education set up by law, but the designation of standards concerning teacher qualifications, like other regulations for the program, are rightly left with the proper educational authorities.

10. Of first importance in any State education program is the need of adequate and continuing provision for the enumeration of handicapped children through the regular school census. Organization for special education cannot be effective unless the children whom it is to serve are identified. More and more, States are recognizing this fact and are setting up the proper machinery to find out who and where the children are for whom the program functions.

11. Cooperation among all existing agencies serving the handicapped is stipulated by law in an increasing

number of States. Medical services, educational services, and social services for handicapped children are all interrelated. The most effective results can be secured when every agency recognizes the functions of all other agencies concerned and works in cooperation with them toward a total coordinated program.

Seventh Grade . . .

(From page 2)

lected more stories and took Indians as their special project. It was when the 1944-45 seventh grade started their work on a historical Dutch project that the North Salem Board of Education decided it would be an excellent thing to publish the stories collected by the three social-studies classes in a bound book also called *When Our Town Was Young*.

The material is grouped under such interesting chapter headings as: The Founding of North Salem, Among Our North Salem Pioneers, The Indians Our First Settlers Found, Early Life in North Salem, North Salem in the American Revolution, Early Farms and Industries in North Salem, Our North Salem Circus, Three Historical Tours of North Salem.

The boys and girls found that the older members of the community had information and documents which made it possible for them to learn the things that they wanted to find out. After studying the history of the first settlers in the light of present-day facts, the young people made the following observation, "Their (Dutch) sturdy honesty, their thrift, their self-reliance, their industry are part of our North Salem heritage."

The entire class visited two of the homes that contained furniture and utensils used by their ancestors during Revolutionary days.

The students interviewed the grandson of Hachabiah Bailey who exhibited his famous elephant, Old Bet, and from whom the people of North Salem probably got the idea of organizing their own circus. The young people tell many other significant facts of the town's early history that showed their interests, perseverance and capacity for work under skilled guidance in a co-operative enterprise.

Copies of *When Our Town Was*

Young may be obtained for \$2 from the Central High School, Purdys, Westchester County, N. Y. Profits from the sale of the book will be used to improve the school library.

High-School Acceleration for Veterans

Adjusting the school to the needs of the students is now a reality for veterans at the Benjamin Franklin High School in Philadelphia, Elmore E. Pogar, Educational Counselor for Veterans Education, Standard Evening High School, reports. Through the co-operative efforts of the Board of Public Education, the Veterans Administration, and the administration of the high school, a program providing for high-school acceleration was formulated.

The program is geared to the needs of the veteran. Training time provided by Public Laws 16 or 346 does not make the leisurely, typical high-school program attractive to a great number of the veterans, those who have little or no high-school education beyond tenth grade. Time, then, is their greatest need. Philadelphia is providing for satisfactory completion of a minimum of 30 clock-hours per course which will entitle the student to a half unit of credit. To accomplish this, subject matter has been stripped of nonessentials, class size has been limited to 10, and equivalent time outside of class work is required.

Typical academic high-school courses are offered. Since nearly all the men are prospective college students, the work is of college preparatory grade. The students select courses which will enable them to satisfy entrance requirements and prepare them adequately for their college work. Five classes per day meeting 1 hour each is a typical program. Gymnasium and other recreational activities are provided.

An independent staff of competent, sympathetic instructors has been assigned. Because of the necessity for guidance and testing, a full-time counselor is also a member of the staff. Administration is under the leadership of the assistant director for vocational education of the city of Philadelphia, and the principal, and the assistant principal of the Benjamin Franklin High School.

Health Needs of School-Age Children and Recommendations for Implementation

THE following statement of the health needs of school-age children and suggested ways for meeting them was prepared by a subcommittee appointed at a meeting of representatives of Federal governmental agencies whose programs affect the health of the school-age child.

The meeting, called early this year by Frank S. Stafford, Health and Physical Education Service, U. S. Office of Education, was attended by representatives of the U. S. Public Health Service; Committee on Physical Fitness; Children's Bureau, U. S. Department of Labor; War Food Distribution and Extension Division of the U. S. Department of Agriculture; Recreation Division of the Office of Community War Services; American Red Cross; U. S. Office of Education; Office of the Coordinator of Inter-American Affairs; American Association for Health, Physical Education, and Recreation—National Education Association; School Health Section of the American Public Health Association; and the National Organization for Public Health Nursing.

The purpose of the meeting was to exchange information, study needs, and make recommendations for future action. It was felt that there was special need for cooperative planning of the activities of the Federal Government in school health, including the existing programs, the planning of any extension of these programs, the formulation of over-all policies, and the establishment of regulations governing the administration of any funds that might be available.

A subcommittee was appointed to study and make a report on child health and fitness needs and to suggest methods of implementing programs which would meet those needs. Members of this subcommittee, which prepared the following statement, are Katherine Bain, Children's Bureau; Mayhew Derryberry, U. S. Public Health Service; George W. Wheatley, School Health Section, American Public

Health Association; Ben W. Miller, American Association for Health, Physical Education, and Recreation; and Mr. Stafford, U. S. Office of Education.

The terms health, school health, or school health program used in this report include those programs designated at various times and places as health and physical education, health education, physical fitness, fitness program, school health program, school health services, healthful school living, hygiene, hygiene and sanitation, and health instruction.

(It is the intent of this report to give appropriate reference to the health needs of school-age children both in and out of school, but it seems advisable to omit discussion in the report of how the health needs of children who have left school should be met.)

Part I—A Statement of Needs¹

Educators and health workers have for years considered the health of school children an area of prime importance to society. The draft findings of World War I and more recently the Selective Service findings of World War II have again focused the attention of the Nation on the health and fitness needs of school-age children. Those children 5 to 17 years of age composed 21.7 percent of the total population in 1942.

The schools, because of compulsory attendance laws, have contact with more of the children and youth for longer periods of time than any other public agency. No other agency except the home has such an opportunity to give them significant instruction and to develop child health. Less personal, less emotional, and in general more scientific than the home, the schools recognize social as well as individual values in conserving the health of children. It is here that children are first grouped

together for long periods under supervision and that health changes may be first observed.

The schools are the universal agency whose unique function is education. They possess the leadership, facilities, and equipment for securing effective health outcomes during the most critical and formative period of learning. Yet America with such a strategic and universal agency as the schools has tended to oversimplify or neglect the health objectives in education. Health and physical fitness cannot be conferred by talk or sporadic and feeble efforts. Long term and constant efforts are essential. Economic factors, lack of availability of personnel and service, and lack of the kind of education that precipitates appropriate action reflect the inadequacies of past efforts.

The Selective Service findings reveal that many adults 18 to 36 years of age have physical and mental defects which prevent them from serving in the armed services of our country. The situation which concerns the Nation is that of the approximately 22 million men of military age, 40 percent, or between 8 and 9 million, of them are unfit for military service. Of the over 4 million rejected for military service, approximately 700,000 had remediable defects which were not remedied. It is reasoned that if those defects were detected early and treatment received, these men would not have been rejected. The table below is an illustration of the extent that these health and education defects are preventable and correctable. The expense and loss of time is tremendous.

Defect corrections by Army²

Dental work:	
Cases	14,600,000
Fillings	31,000,000
Bridges and dentures	1,400,000
Dentures repaired	198,000
Teeth replaced	6,000,000
Venereals inducted and treated ..	138,700
Hernia operations (1943)	25,900
Illiterates inducted and corrected	
June 1, 1943 to May 31, 1944 ..	133,600

¹ Acknowledgment is gratefully made to S. S. Lifson, Health Educator, U. S. Public Health Service, District No. 1, New York, N. Y., for compiling the basic content incorporated in part I of this report.

² Wartime Health and Education—Hearings before a Subcommittee of the Committee on Educa-

Educational attainment is based on biological endowment and proper growth and development. Infections and physical impairments decrease the opportunity which a child has for optimum physical and educational attainment. Children attend school for 5 hours a day for approximately 175 days a year for 12 years. This is society's way of assuring that each succeeding generation will rise above the accomplishments of the preceding generation. The full benefits of the provisions of society can be realized only when children enjoy optimum health. For that reason, programs designed to assure healthy children have been inaugurated in the schools. They are concerned with health services, health guidance, health instruction, physical education, and recreation.

The preinduction or preemployment medical examinations of young draftees and of young workers and the close medical supervision received by members of the armed forces and to an increasing degree by workers reveal many neglected physical and mental inadequacies which could and should have been prevented or corrected in childhood. Similar findings in draft examinations in World War I led to a great wave of legislation intended to prevent this from again occurring by providing for medical inspection and physical education of school children. Studies of these efforts in the last 20 years have revealed again and again their inadequacy to prevent the conditions now being revealed. This report recommends measures to strengthen and supplement school health programs in order that children may have maximum opportunity to achieve their optimum growth and development and may know how to live healthfully.

Health needs of school-age children

What are the health and fitness needs of school-age children which must be considered? These needs may be defined as follows:

1. A safe, sanitary healthful school environment

tion and Labor, U. S. Senate, 78th Cong., 2d Sess., Pursuant to S. Res. 74. Part 5. Washington, D. C., U. S. Government Printing Office, July 10, 11, and 12, 1944. p. 1667.

This means:

Control of such environmental factors as heat, air, light, sunshine, buildings, grounds, noise, color, form, construction, water supply, sewage disposal, and play space so that they contribute to, rather than deter from, healthful school experiences.

An environment in which boys and girls are freed as far as possible from the conditions which produce unnecessary fear, anxieties, conflicts, and emotional stresses.

2. Protection from infections and conditions which interfere with proper growth and development

This means:

Adequate examination and inspection of pupils, teachers, and custodial personnel to detect communicable diseases as well as deviations which impair health.

An opportunity to receive necessary immunization and testing procedures.

3. An opportunity to realize their potentialities of growth and development

This means:

Adequate medical and dental care on the basis of individual needs as shown by examinations.

Adequate nutrition to assure well-nourished children.

Participation in a program of physical activity designed to develop organic power, strength, skill, agility, poise, and endurance, as well as ability to participate with others in games and sports which promote alertness, cooperation, respect for individuals and groups, initiative and a feeling of personal worth.

Participation in a recreational program designed to create interest in activities which develop talents making for wholesome living, and broadening the child's horizon of the world in which he lives.

A balance and rhythm in the child's daily life which is in keeping with his physical, mental, and emotional needs.

4. To learn how to live healthfully

This means:

An opportunity to learn and to make wise decisions, form health habits and attitudes based on scientific knowledge of health and disease.

An opportunity to make choices and assume increasing responsibility for one's own personal health.

An opportunity to acquire information and attitudes appropriate to the grade level about physical and emotional development, maturity, and patterns of social conduct which will contribute to the health of the individual and other citizens to insure wholesome family and community living.

5. Teachers who are equipped by training, temperament, and health not only to give specific instruction but also to help children to mature emotionally

This means:

Teachers not only prepared to teach but those who are also emotionally stable and adjusted, because the development of healthful personalities is dependent upon the relationships and attitudes which are built up between teacher and children.

Unmet needs

Federal, State, and local communities need to consider the following:

1. Safe, Sanitary, Healthful School Environment

No specific data are at hand to give an over-all national picture of the adequacy and condition of school buildings now in use. It has, however, been estimated that it will require a plant construction program costing approximately 3 billion dollars to compensate for postponed construction and to recondition, renovate, and repair existing educational plants. This 3 billion dollar estimate is only to catch up with the wartime lag in school plant construction and maintenance. It is further estimated that an additional 4 billion dollars will be required to provide adequate educational buildings, equipment, and grounds which will fully meet the environmental and educational needs of all children and youth.³

In its publication, *Education for All American Youth*, the Educational Policies Commission advocates a school plant which can serve the entire community for all ages.⁴ The American Association of School Administrators in its publication, *Paths to Better Schools*, advocates the same principle.⁵ That communities and States have a tremendous task ahead, if adequate school facilities are to be provided, may be seen from the 1941-42 report of the U. S. Office of Education. Of the 226,660 buildings reported in use, 107,692, or 48.4 percent, were one-room buildings. "The proportion that one-room schools constituted of the total in

³ Hamon, Ray L. Senior Specialist in School Plants. U. S. Office of Education, Washington, D. C. (Unpublished statement.)

⁴ National Education Association of the United States. Educational Policies Commission. *Education for All American Youth*, Washington, D. C. The Association, 1944. p. 366-67.

⁵ ———. Twenty-Third Yearbook, American Association of School Administrators. *Paths to Better Schools*. Washington, D. C., The Association, 1945. p. 255-58.

1941-42 ranged from 6.3 percent in New Jersey to 87.3 percent in South Dakota. In 18 States more than half of all buildings in use were still one-teacher schools."⁶ This does not mean that one-teacher schools contribute to ill health but it is indicative of the need for buildings that can serve all of the needs of the whole community.

2. Preventive Health Program

A health program in the school that is truly preventive must be such that conditions which impair the present or future health and fitness of the child will be recognized and prevented, corrected, or otherwise alleviated.

With respect to health service every school-age child needs:

a. Immunization against smallpox, diphtheria, and in some instances pertussis, tetanus, and typhoid.

b. Protection against exposure to such diseases as tuberculosis through examination of teachers and other personnel with whom children come in contact in school.

c. Dental care—examination and treatment of any dental abnormality.

d. Screening procedures for vision, hearing, and other defects and conditions.

e. Medical care—examination and treatment of any physical and mental abnormality.

f. Health supervision—while the child is in school, day-to-day observation by teachers for signs of good health or illness and protection from injury.

g. Mental health service.

h. Nutrition—to assure well-nourished children.

To achieve these goals the amounts of funds being expended are very inadequate.

In the 1941-42 report of the U. S. Office of Education, 43 States report expenditures for school health services. Per pupil expenditure for health services, for all children 5-17 years of age as reported amounted to 78 cents per year. This ranged from .018 cents in one State to \$3.07 in another. Ten States reported per pupil expenditures of more than \$1. Nineteen States reported expenditures of less than 50 cents per pupil.

Expenditures for education per pupil in average daily attendance ranged from \$31.23 in Mississippi to \$169 in

New York, with the national average at \$94.03. Expenditures for health services by State departments of education amounted to eight-tenths of 1 percent of the annual average educational expenditure per pupil.⁷

The figures covering expenditures for health service as reported by State departments of education do not give the complete picture. Departments of public health, both city and county, have for years provided some health services to school children. In a report by Mountin and Flook dated 1941⁸ it is reported that in: 5 States, health departments have full responsibility for school health services; 1 State, the education department has full responsibility for school health services; 41 States, health and education departments jointly share responsibility; 3 States, in addition to education and health, some other State agency is interested in school health services.

Federal funds available to States for maternal and child health through appropriations under Title V, Part 1 of the Social Security Act, are used to promote and carry out school health services in many counties. In addition, States and localities contribute to the support of school health services. Funds available to the State health departments through Federal grants-in-aid for general public health purposes also contribute to school health service through the support of county health units.

The amount expended by public health agencies for school health services is not known, yet the evidence previously presented is indicative of how far short of our health goals we are for school children.

The most satisfactory progress has been in regard to protecting the child from those communicable diseases for which there are specific preventive measures. Increasing numbers of children are entering school already protected against these diseases and more

schools are prepared to administer necessary protection to those who need it. Here legislative and health education activities have been largely instrumental in bringing about utilization of these protective measures. Rural areas and States without vaccination laws have made the poorest progress in the application of modern knowledge in the control of communicable diseases of childhood. This is one aspect of the school health program which will assume much less importance in time, as the community health services are able to reach all children during infancy and bring them to school already protected against certain diseases.

As one of the controls for communicable disease, teachers and custodial personnel should be X-rayed for tuberculosis prior to employment and at regular intervals thereafter. High-school students also should be X-rayed.

The most universal need among children is in regard to dental care. Surveys have revealed how widespread is dental caries among the school-age population, how rapidly untreated caries progress, and how costly and extensive is the repair work required to rehabilitate the neglected teeth of the adult. In some localities substantial sums of public funds are spent to examine children's mouths to find caries and little or no money is spent for corrective work. Dental examinations at present are of little use as a screening measure, since most children need care.

After a complete dental care program for children is inaugurated and continuing care is provided, the annual or semiannual examination will need to be part of the program.

Three organs intimately concerned with the education of the child are those involved in seeing, hearing, and speaking. The adequacy of the sense organs and the environmental conditions that make for satisfactory functioning are, therefore, of special importance to school authorities. Prevention, case-finding and treatment facilities for these conditions are inadequate. In urban centers, vision testing and correction is a more widespread practice than detection and treatment of hard of hearing and defective speech cases. In rural areas,

⁶ U. S. Office of Education. *Biennial Survey of Education, 1938-40 and 1941-42. Statistics of State School Systems. Vol. II, Chapter III.* Washington, D. C., U. S. Government Printing Office, 1942.

⁸ Mountin and Flook. "Distribution of Health Services in the Structure of State Government." In *Public Health Service Bulletin No. 184*. Third Edition. 1943.

⁷ U. S. Office of Education. *Biennial Survey of Education, 1938-40. Vol. II, Chapter III.* Washington, D. C., U. S. Government Printing Office, 1940. p. 33.

as a rule, there are no satisfactory arrangements to care for poor sight, hearing, or speech cases among school children. All three of these conditions require specialized medical service for diagnosis and treatment. On the other hand, case-finding can be done by tests conducted by nonmedical personnel. These tests are particularly important when the child enters school, but should be repeated at intervals.

The main purpose for the inauguration of medical examinations or "medical inspections" in the school was to detect physical defects. Forty or more years ago when medical inspection in the schools began, it was introduced as a case-finding procedure. At that time it was the best way to discover children in need of medical attention.

In a recent report by the Society of State Directors,⁹ 41 States submitted answers to questionnaires stating that they all recommended physical examinations for students: "12 States, however, require such examination by law. Of these 12 States, 5 require the examination annually, 1 requires it every 4 years, and 6 require it every 3 years.

"Three of the twelve States report that students may be exempt from the examination for religious or constitutional grounds, and nine report that they may not."

Modern public health methods have led to the development of more satisfactory "screening" procedures than medical inspection to find cases of ill health. Examples are the Wassermann test, the tuberculin test, the paper or micro-film X-ray, the audiometer, the Snellen test, and others. All of these look for special conditions among population groups where the condition is known to be prevalent. Appropriate tests, such as the audiometer and the Snellen test, when properly used with school children make it possible to examine children frequently and efficiently.

Physicians and nurses well qualified in public health and education are needed to organize, supervise, and interpret such modern case-findings programs in the school and to secure additional diagnostic service and treatment for the defects discovered. In

addition to such specific defect-finding tests to be done at frequent and regular intervals during the child's school life, provision must be made for thorough medical examinations of school children because the "screening tests" mentioned above are not a substitute for medical appraisal of the whole child.

But such an evaluation takes time and requires a skilled medical and nursing service. There must be opportunity for the physician and nurse to learn the history of the child, to look for physical and emotional abnormalities and developmental defects, to evaluate screening tests which may have been given, to plan with parents and teachers for necessary treatment and for adjustments at school and home. Medical examinations as described are at present rarely provided. If such complete examinations were made, fewer children would go through school with neglected health conditions, and more parents and children would have conviction about the value of health examinations. High-school students frequently have even fewer health services than elementary school children. Though the stresses and strains of this period are very great, often all that is provided is examinations for the students taking part in competitive athletics.

Studies of the reasons for failure to secure treatment of physical defects has shown that many children did not receive treatment because the condition was not accurately diagnosed. Perhaps the most conspicuous medical condition in this category is heart disease. This condition is the most serious disease among children of school age and yet measures for its accurate recognition and adequate treatment are not available to most school children. Diagnostic and treatment services should be provided to aid in the proper care of this condition.

Special medical facilities are needed also for many other medical problems of school children, such as malnutrition, orthopedic, hard of hearing, poor vision, and emotional abnormalities. In urban localities the problem may be solved by the mobilization and better utilization of existing resources. In rural areas it will be necessary in many localities to create the treatment facili-

ties and provide adequately trained personnel.

Health services for school children require adequate medical and nursing skill in order to function properly. As a rule, schools in large cities have the services of both a physician and a nurse, although the ratio of nurses and physicians to pupils is not adequate to perform the desired functions previously mentioned. In rural areas where approximately 50 percent of the nation's children live, except for some medical inspection by health officers and local physicians, little or no medical service is available to school children. Public health nurses provide service, but this is not adequate in amount to maintain the necessary follow-up to secure treatment for physical and mental abnormalities. There are 845 of 3,000 counties in which there is no public health nursing service.¹⁰

Because they function in the schools, physicians and nurses must understand school methods and problems. For this reason and because of the specialized character of many of the physical and mental abnormalities associated with normal growth and development, physicians and nurses planning to engage in school health work need specialized training. Today this is difficult to obtain.

A key person in the school health service is the teacher. A major objective in school service is to provide for the day-to-day supervision of the child while he is in school. This is largely the responsibility of classroom teachers. But few of them are qualified either through preservice or in-service training to recognize the characteristics of normal, healthy children, or to detect the signs of illness or to utilize height and weight measurement, the school lunch, or vision testing as health teaching tools.

Supervisory medical and nursing personnel to guide physicians and nurses who render school health service is lacking in a majority of States. One State education department provides a supervisory physician and three provide su-

⁹ Society of State Directors of Health and Physical Education. *Proceedings of the Nineteenth Annual Meeting*. News Bulletin No. 35, 1944.

¹⁰ Federal Security Agency. A Report of the U. S. Public Health Service. *Total Number of Public Health Nurses Employed in United States, in Territories of Hawaii and Alaska, and in Puerto Rico and Virgin Islands for Years 1940-44*.

pervising nurses.¹¹ The extent and quality of such supervision are not known in those States where responsibility rests with health departments or is shared.

One other aspect of the preventive program must be mentioned. There is a growing realization among school health workers and persons interested in mental hygiene, that the school needs to look toward a program which will contribute in preventing behavior disturbances from occurring. Fifty percent of all hospital beds are occupied by individuals who were not able to cope with the realities of life. The need for educating youth to make adequate personal and social adjustments to glandular drives is generally accepted.

A realistic health program should include social hygiene education to insure mature, balanced individuals with sound moral standards and socially acceptable personalities. The school health service program if manned with professional workers experienced in child guidance could assist with this problem. The total number of trained psychiatrists in this country is small (3,000) and at present few are available to the civilian population. This need, however, must be met, and school administrators and health officers should plan for services in this important long-neglected area of school health.

Research in school health problems is at the present time virtually nonexistent. For example, little is known as to the reason for the annual increment of vision defects or variations in growth which occur among school-age children. Study of the contribution which environmental factors make to the health of school children should be made with as much vigilance and persistence as is done in the field of industrial hygiene.

Administrative studies of the most effective way to organize a program of instruction and service and to reach the goals described are greatly needed.

¹¹ U. S. Office of Education. *Biennial Survey of Education, 1938-40. School Hygiene and Physical Education. Vol. I, Chapter VI.* Washington, D. C., U. S. Government Printing Office, 1940.

3. An Opportunity to Realize their Potentialities of Growth and Development

Adequate medical and dental care

For many years school health services have been discovering defects in school children, but little has been done to correct these defects.

The Hagerstown study¹² showed that a relatively large number of the selectees who had been rejected because of certain defects already gave evidence of the same defects 15 years before as shown by school examinations.

From all available sources of information, estimates have been made of the number of children under 21 years in the United States with various physical handicaps. They are as follows:¹³

Orthopedic and plastic conditions	500,000
Rheumatic fever or heart disease	500,000
Major allergic disorders	4,000,000
Asthma	1,250,000
Convulsive disorders (epilepsy)	150,000
Diabetes	35,000
Visual defects	4,000,000
Totally blind	15,000
Partially seeing	50,000
Refractive errors	9,935,000
Hearing defects, impaired hearing, including deaf	2,000,000
Deaf	17,000

In addition, it is estimated that at least three-fourths of all school children have dental defects.

Examination of youth of 14-17 years participating in National Youth Administration programs in 1941 revealed a startling number of conditions needing correction.

Number of specific recommendations for medical services and corrections for 100 examined youths, aged 14-17¹⁴

Nature of service or defect	Percent
Dental care	74.5
Refraction	15.2
Glasses	12.2
Surgery on eye and annexa	.3
Tonsillectomy	15.1
Circumcision	3.8
Hemorrhoidectomy	.3
Hernia repair	.8
Other major surgery	.9
Other minor surgery	9.0
Hookworm	2.6

¹² U. S. Public Health Service. *Child Health and the Selective Service Physical Standards*, by Clocco, Antonio, Klein, Henry, and Palmer, Carroll E. Public Health Reports. Vol. 56, No. 50. December 12, 1941. Washington, D. C.

¹³ *War-time Health and Education—Hearings before a Subcommittee of the Committee on Education and Labor, U. S. Senate, 78th Cong. 2d Sess., Pursuant to S. Res. 74. Part 5.* Washington, D. C., U. S. Government Printing Office, July 10, 11, and 12, 1944. p. 1857.

¹⁴ *Ibid.*, p. 1858.

Nature of service or defect	Percent
Minor nonsurgical procedures	6.0
Repeated medical therapy	2.4
Special diet (medical advice)	9.3
Study by specialist	9.3
Additional diagnostic procedures	11.5

Factors which prevent school children from receiving adequate medical and dental care are:

- Inadequate and inappropriately distributed medical personnel and facilities.
- Lack of desire for services.
- Inability to buy services.

As reported to the Pepper Committee, "40 percent of the counties of the United States lack full-time local public health service. Many of the existing health departments are inadequately financed and staffed. Minimum preventive services under the administration of full-time local public health departments staffed with qualified personnel should be provided in every community.

"Data submitted by the Procurement and Assignment Service show that at the end of 1943, 553 counties had more than 3,000; 141 counties had more than 5,000; and 20 counties had more than 10,000 people per active physician in private practice. In addition, 81 counties, 30 of which had populations of more than 3,000, had no practicing physician."

Services of specialists are even more inadequately distributed. Of the 2,600 pediatricians in the country, 1,000 serve the 4½ million children living in the large cities, while to meet the needs of the 20 million children living in small communities, there are less than 100 pediatricians.

"The wartime shortages are merely sharper manifestations of the long-standing and steadily growing maldistribution described above. There is every indication that maldistribution will become even more marked after war unless effective steps are taken to reverse the trend.¹⁵ There are indications that dental and nursing services involve similar problems.

"Good medical practice today requires a concentration of skilled personnel and equipment that is found only in good hospitals, medical centers, or group clinics.

"Whereas the national ratio of general hospital beds was 3.4 per 1,000 pop-

¹⁵ *Ibid.*, p. 14.

ulation in the year just before the war, the ratio in such States as Mississippi and Alabama was less than half that. According to the Surgeon General of the U. S. Public Health Service, 40 percent of our counties, with an aggregate population of more than 15,000,000 have no registered hospitals. Many of the counties with hospitals have poor ones, even though they are registered."¹⁶

Family income definitely influences ability to obtain medical care. It is estimated that it takes approximately \$150 per year to provide adequate medical care for a family. Fifty percent of the families in this country earn less than \$2,000 per year, and it is evident that they cannot afford \$150 per year without imposing hardship upon their families.

Medical services have to be available and readily accessible everywhere if people are to learn to use them and want them. In sections which have medical services, extensive educational programs need to be inaugurated so that people will learn how best to use these services. Even in areas that now have a reasonable degree of medical services, educational programs with the children and parents would help to see that these services were used properly.

The medical profession has long suggested that the after-effects of many of the so-called childhood diseases are more injurious to the child than the disease itself. School health workers and school administrators must become more conscious of this fact and explore ways of adjusting school programs so that they will not prevent a child from making a satisfactory recovery. It seems reasonable to suppose that many of the defects found in children can be attributed to a complicated recovery from seemingly unimportant infections.

Nutrition

Dietary deficiency diseases (scurvy, rickets, pellagra) in severe form are not so common among children as a decade or two ago, but they still exist, and mild forms of these diseases are prevalent among children of low-income families. Secondary anemia in children and pregnant women is usually related to a diet deficient in one or more respects. Data from recent studies compiled by the National Research Council¹⁷ indicate that in some parts of the country as high as 72 percent of pregnant women and as high as 85 percent of children of early school age are suffering from secondary anemia.

Many more children suffer from general malnutrition than from any one specific deficiency disease. These children grow at less than the normal rate; their musculature is poor; they have less than average resistance to infections. That the effects of childhood malnutrition may be lasting is indicated by a study of the data from school health examinations of a selected group of young men rejected by Selective Service, for whom records had been kept over a long period of years.¹⁸ The study showed that there was a definite association between the childhood state of nutrition and the development of defects that 15 years later disqualified the adult for Selective Service.

Children need enough of the right kinds of food if they are to achieve optimal development and maintain a high degree of health. Responsibility for nutrition rests with the home during infancy and the pre-school years, but later it is divided between the home and the school. Most children spend the noon hour at school, consequently the school should provide a complete noon meal, available to all children without discrimination. For children who must travel long distances or who require more food than is supplied through the usual number of meals, the school may need to provide supplementary midmorning and midafternoon nourishment. The serving of food should be an educational experience and should be accompanied by instruction that will enable children to choose the foods that contribute most to meeting their nutritive requirements.

Physical education

All children need physical activity if they are to achieve maximum growth and development. So that children may build organic power, strength and endurance, and learn how to use their bodies efficiently, physical education programs have functioned in some of the schools for many years.

The Society of State Directors of Health and Physical Education states that¹⁹ "27 States reported having a law making physical education compulsory. (17 States with directors and 10 without directors); 5 States reported that physical education was compulsory, due to State board of education regulations.

"The requirement in regard to time allotment varies from two times a week to five times a week, and from 60 to 300 minutes." These data would indicate that State departments of education have not, for the most part, recognized the importance of incorporating physical education as one of the curriculum requirements for all children. Children in the elementary grades need a total of from 3 to 4 hours of physical activity daily.²⁰ Children in the junior and senior high schools need at least 60 minutes per day of physical activity adapted to individual needs and capacities within the school program and an equal amount after school hours. This is essential if the school program is to contribute to the attainment of a vigorous youth. Physical education programs should be conducted and supervised by properly trained teachers. Adequate space and facilities are also a requirement.

Recreation

If education builds for the assumption of responsibilities in adult life, consideration must be given to the recreational needs of children. Varied programs both in and out of school, under school sponsorship and in cooperation with other agencies, should be developed for children. Children need to learn through profitable experiences how to make wise choices in the use of their leisure time. This is both a school and a community responsibility and should be solved jointly.

School administrators must consider the schedule which is developed for children. Too often individual differences are overlooked and all children of one chronological age are made to fit the same pattern without due consideration being given to the needs of

¹⁶ *Ibid.*, p. 12.

¹⁷ *Ibid.*, p. 1858.

¹⁸ *Ibid.*, p. 1858.

¹⁹ *Proceedings of the Nineteenth Annual Meeting*. Op. cit.

²⁰ *Paths to Better Schools*. Op. cit. p. 75.

individual children. A school staffed with personnel who know the needs of children can be of immeasurable assistance in advising adjustments for particular children, and thus serve to prevent emotional disturbances and forestall impediments to the orderly growth and development of the child.

4. To Learn How To Live Healthfully

Schools in the past have placed great dependence upon health knowledge to motivate improved health behavior. This approach did not take into account the elements of the learning process, and we now find adults who failed to learn how to live healthfully while in school. The attainment of health is an individual responsibility for which children must be educated. The foundation for healthful living is based on scientific knowledge. The manner in which we acquire this knowledge, however, determines to a large measure, the degree to which it is utilized in our daily lives.

By using initiative, imagination, and the resources of the school and community, an alert teacher can expose children to experiences in which their knowledge will be tried and tested. Health is dependent not only on a balance between the physiological requirements of the body, but also on a balance between the emotional and thinking qualities of the child. Attitudes which build up unreasonable likes and dislikes, fears, repulsions, or overdependence all affect the equilibrium essential for the attainment of optimum health. The educational program should be concerned with the total child in relation to his needs and his environment.

The program for healthful living is not dependent solely upon what is done during the health education period. Since all experiences of the child condition his behavior, health education must be thought of as a product of a great variety of experiences in home, school, and community. The organization and atmosphere of the entire school has a bearing on healthful living. All teachers who come in contact with the child exert an influence which

must be considered. Healthful behavior as revealed through daily habits is dependent upon the expression of scientific and intelligent attitudes which give a basis for self-education. Not only is the provision of opportunities basic for good health practices but actual pupil participation is essential.

Data regarding the programs of health instruction in the schools of the country are not plentiful. The Society of State Directors reports that:²¹ "21 States reported that health instruction is given in the elementary school; 19 States reported that health instruction is given in the junior high school; 23 States reported that health instruction is given in the senior high school."

The amount of time devoted to this activity is not given nor are there data on the number of special teachers of health education employed in the schools.

5. Teaching Personnel

"Examination of health teaching practices from the standpoint of those who administer the schools reveals, in general, two apparent needs: (1) The need for specialists in health teaching fields, and (2) the need for a better health education background for teachers of all subjects."²²

Kleinschmidt points out that teachers have not been prepared adequately to understand the health needs of children or how to meet them because:

- a. School administrators have been slow to recognize the need for college hygiene programs;
- b. Health instructors have not been well prepared;
- c. There has been ineffective leadership in school health education;
- d. School curricula are overcrowded; and,
- e. Hygiene courses have been inadequate in regard to content.

He further comments, "Without suitably educated health instructors in charge of teacher-education institutions, it naturally follows that these institutions can neither prepare the

ordinary classroom teachers in the elementary and secondary schools for their tasks as health educators, nor equip the health supervisor or health coordinator for leadership in the field."²³

Another need to improve the teaching personnel is inherent in the compensation that they receive for their work. Salary schedules show that the average teacher's pay in 1941-42 was \$1,441 per year, \$1,955 in urban communities, and \$959 in rural communities. "In the 14 Southern States reporting on this item for 1941-42, average salaries for Negroes ranged from \$226 in Mississippi to \$1,593 in Maryland, in comparison with a range for white from \$712 in Mississippi to \$1,796 in Delaware. In 6 of the 14 States reporting, the average salary for Negro teachers was less than \$600."²⁴

There is also the need to attract the kinds of individuals who are equipped to work with children. The physical, mental, and emotional status of a teacher is of more importance to the growth and development of children than the teacher's command of subject matter. If schools are to make a contribution in preventing the 1 in 22²⁵ of the 15-year-olds who will eventually find his way into a mental institution, the health and emotional stability of teachers should receive serious consideration. Fenton warns that, "The most serious hindrance to efforts along the line of mental hygiene in the schools is inadequate training and understanding of the average school administrator and classroom teacher."²⁶

In summary, the most pressing needs in securing properly qualified teachers are selection of candidates for teacher education, preparation in the basic sciences, educational methods, certification that requires preparation in health and physical education and assures healthy teachers, adequate supervision, and adequate compensation.

²¹Ibid., p. 14.

²²Biennial Survey of Education, 1938-40, and 1940-42, op. cit., p. 37-38.

²³War-time Health and Education—Interim Report from the Subcommittee on War-time Health and Education to the Committee on Education and Labor, U. S. Senate, Pursuant to S. Res. 74. Washington, D. C., U. S. Government Printing Office, January 1945. p. 2, 3.

²⁴Opportunities for the Preparation of Teachers in Health Education, op. cit., p. 11.

²⁵Proceedings of the Nineteenth Annual Meeting. Op. cit.

²⁶U. S. Office of Education. Opportunities for the Preparation of Teachers in Health Education, by Earl E. Kleinschmidt. Washington, D. C., U. S. Government Printing Office, 1942. 117 p. (Bulletin 1942, No. 1) p. 11.

Part II—Implementation

A picture of the health or fitness needs of school children has been drawn and data presented to show that the needs are not being met.

A program which effectively meets the needs of the school-age child is complex. This complexity results in part from the fact that the school-age child is subject to the concern and influence of numerous agencies, professional groups, and individuals who are interested, officially or unofficially, in programs which affect the health of the community in general and frequently the health of the child in particular. The two official agencies most likely to sponsor health programs for children are the State health and education departments.

Not all but many features of the community health program which affect the school-age child can be more easily and efficiently carried out while he is in school than is possible outside the school. These health activities *within the school* include examination, immunization, and follow-up leading to corrective services, plus the provision for a safe, sanitary, and healthful school environment.

In addition there must be services and facilities in the community. The teaching of health principles and practices and a well-rounded physical activity and recreational program are essential to a well-developed school health program, which in addition to other school activities should contribute to the best welfare of the school child. Since all experiences of the child condition his behavior, his experiences in the home, the school, and the community must provide opportunities for active pupil participation.

The joint and overlapping responsibility of the agencies involved can be seen if one will fill out the attached table.

An efficient, effective health program for all children of a community will result only when:

1. The public departments of health and of education as well as specialized personnel within each department agree to the principle of coordination of health programs for school children, including the health program of the community and the health aspects of school programs.

2. Each agency and profession respects the contribution of the others.

3. The agencies agree to an administrative plan which will promote the most efficient and cooperative direction of the several phases of the program and the supervision of the several types of professional workers.

4. The professional workers of each agency are permitted to perform services in their professional fields for the best interest of all children.

5. Sufficient funds become available to carry out the program.

The following specific proposals are made:

On the Federal Level.—The U. S. Office of Education, Children's Bureau, and the U. S. Public Health Service should form a committee²⁷ to plan cooperatively the activities of the Federal Government in school health including the existing programs, the planning for any extension of these programs, the formulation of over-all policies, and the establish-

²⁷ Dr. Katherine Bain, Director, Division of Research in Child Development, Children's Bureau; Dr. Mayhew Derryberry, Chief of Field Activities and Health Education, U. S. Public Health Service; and Frank S. Stafford, Health and Physical Education Service, U. S. Office of Education have been appointed as such a committee by the administrators of the respective agencies.

ment of regulations governing the administration of any funds that may be made available.

On the State and Local Level:

1. Committees comparable to the coordinating committee on the Federal level should be established at the State and local levels between departments of public education and health. These committees may include representatives from professional educational institutions and other agencies and professional groups concerned with the health of the school child.

2. In the departments responsible for health instruction, physical education, and health services there should be qualified professional personnel such as physicians, nurses, and educators all of whom have been trained in school health.

3. A comprehensive program to meet the health needs of school children in any State should provide for:

- (a) Development or extension of programs in teacher-education institutions to prepare administrators and teachers so that they can participate effectively in the school health program.

- (b) Appropriate pre-service and in-service education for school health administrators,

Governmental responsibilities for the school health program

Program essentials	Responsible agency			
	Educational	Health	Joint	Other
I. Safe, sanitary, healthful environment including:				
1. Grounds available for school and community				
2. Buildings available for school and community				
3. Janitorial service—adequate and functioning				
4. Time allotment for instruction, examination, recreation, and athletics				
5. Periodic inspection, repair, and remodeling				
II. School health personnel:				
1. Teachers trained in school and public health education—certification and salaries				
2. Specialists—physicians, dentists, nurses, teachers, and nutritionists				
3. Counseling and guidance				
4. Supervision				
III. Health service program:				
1. Pupil inspection and screening				
2. Periodic medical and dental examination of personnel and pupils				
3. Establish and maintain cumulative health and fitness records				
4. Correction of medical and dental defects				
5. Communicable disease control—X-ray, immunization, isolation, and quarantine				
6. School lunch				
7. Mental hygiene				
8. Adapted physical education (correctives)				
IV. Education for healthful living:				
1. Graded instruction in personal and community health and hygiene				
2. Graded instruction in physical education and athletic activities				
3. Participation in planned health activities and practices aimed at the prevention of disease and the formation of good health habits and attitudes				
4. Instruction and participation in recreational activities				
5. Instruction and participation in nutrition education				

teachers, nurses, physicians, dentists, nutritionists, and other specialized health personnel serving the schools.

(c) Adequate time allotment for health instruction and physical education of children and for their participation in solving individual and community health problems.

(d) Planning for construction and inspection of the school plant and its sanitary provisions and a planned program to insure and utilize a safe and sanitary school environment including transportation.

(e) Thorough school medical examinations including necessary immunization and laboratory procedures.

(f) Special testing programs and treatment as needed for abnormalities such as those of vision, hearing, and speech.

(g) Cumulative health records including record of nutritional status.

(h) A school lunch program developed as part of the total educational program.

(i) Dental care.

(j) Mental hygiene.

(k) Care for children with crippling diseases, especially rheumatic fever.

(l) Treatment as needed for other adverse health conditions.

(m) Demonstration areas for the development of improved techniques, to meet the needs with respect to the school health programs of the individual States.

(n) Organized program of parent participation and education.

(o) Health services for school personnel.

Additional References

Association for Childhood Education. *Healthful Living for Children. What are the Characteristics of an Individual Growing Toward Optimum Health*, by Rose Lammel. Washington, D. C., The Association, 1944.

"Preparation of Teachers for the Program of Physical Fitness through Health Education." *Education for Victory*, 1: 32, June 13, 1943.

Society of State Directors of Health and Physical Education. "Present Day State Programs in Physical Education." Committee Report by Ray Duncan. New York, April 1944.

Welcome to Reprint

Frequent requests are received by the U. S. Office of Education for permission to reprint material from the Office's periodical. This may be done without special permission. When excerpts are reprinted, however, it is requested that they be used so that their original meaning is clear.

Dental Programs in Local Schools

by Carl A. Jessen, Senior Specialist in Secondary Education

EARLY in 1945 the U. S. Office of Education was receiving descriptions of high-school dental programs under way in local school systems—county systems, city systems, and individual high schools. The mailing list for this study was built up through the cooperation of chief State school officers who had been asked by Commissioner Studebaker to supply the names of communities that had been especially successful in improving the teeth of high-school pupils. As a result of the canvass, reports were received from 36 of these selected schools and school systems in 20 States and the District of Columbia.

Four reported that they formerly had an effective dental program but that war conditions and especially the shortage of dentists in the community had forced discontinuance of school dental service. All of these indicated that they are looking forward to resumption of the service after the war. Among the remaining 32, several stated that school dental services had been much curtailed during the war.

Some of the programs are conducted by the schools, some by public health services, some principally by local dental societies. A notable feature about the descriptions of these effective dental programs is that the control of them apparently is not very important in the minds of those who prepared the reports. The services are the all-important thing; and those services are secured from whatever agency is in the best position to render them. The greatest success attends coordinated effort. For a highly effective program there must be wholehearted enthusiastic cooperation among educators, practicing dentists, and health authorities.

Dental Examination

An examination of the teeth of pupils is one of the foundation stones upon which these successful dental programs are built. All but three of the reports mention it. The three which make no mention of a dental examination are all of them concerned prin-

cipally with correction of tooth defects among children who are unable to pay for dental care. Just how those needing dental care are identified is not fully clear from the reports of these three systems, but presumably pupils who can pay for dental care go to their family dentists and only those unable to pay for dental care are examined on time paid for by the school, the department of public health, or some civic organization.

In 7 of the school systems the examination is conducted by a school nurse or dental hygienist, in 20 by a dentist, and in the remaining 5 by a physician. Rather regularly the examination takes place once a year. Usually it includes all pupils, but in 2 schools it ends with the elementary schools and in 2 others with the junior high school. Three of the school systems rely entirely upon examinations by family dentists and 3 give the pupil the option of submitting a certificate from his family dentist or being examined by the school dentist.

Notice to Parents

A note to parents is a feature so recurrent as to be practically a constant in these programs. In cases where the reliance for examinations is placed on the family dentists the note to parents usually is of a type urging that the examination be conducted promptly. In the cases where the examinations are conducted by school or public health officials the note to parents takes on the character of a report of findings and an exhortation to action if tooth defects exist. Only six of the schools make no mention of a notice to parents and it may well be that some of these follow the practice but neglected to mention it.

Follow-up and Dental Education

Further follow-up is mentioned by many schools. Most frequently this follow-up is the responsibility of the dentist or nurse or physical education department. Two schools mention homeroom teachers as responsible for

the follow-up. In one community the PTA has interested itself in securing 100 percent corrections. In one school system there is a January follow-up to learn what corrections have been made since the fall inspection. In another school system a special check is made at the time of the annual dental inspection to discover what corrections have been made since the last previous inspection. Nine of the thirty-two schools mention that a report is sent to the school by the dentist making the correction; in one school this report comes from the parents.

Special education concerning the care of the teeth is mentioned by most of these selected schools. Some of this is classroom instruction usually as a part of health education. Frequently it includes also motion pictures, film slides, charts, models, plays, puppet shows, and assembly programs. Generally the instruction is for pupils in the schools; however, several of the schools feel that the instruction about dental health of growing boys and girls ought to reach the parents no less than the pupils; these schools develop their instruction on dental matters accordingly. Several of the programs have been in operation for 20 or more years and the community has become "dental conscious." In addition to the schools and the public health authorities, the PTA, the woman's club, the junior league, the nursing association, the local dental society, and the local dairy council are community agencies mentioned in one or more reports as having a part in developing or maintaining the dental program.

Correction of Dental Defects

With few exceptions reliance for corrections is placed upon dentists in private practice. In order to make the plan effective many of the school systems mention that pupils may be excused from school to meet dental appointments. In some communities dentists have agreed to reserve certain times, especially after-school hours and Saturdays, for appointments of school pupils.

Rather generally some sort of provision is made for dental treatment of pupils whose parents are unable to pay for the needed dental work. Of the 32 communities, 23 report that they make such a provision. School dental clinics of

one kind or another supply dental service to indigent pupils in 12 communities of the 23. In 2 the public health department provides the service, and in 2 a welfare agency supplies it. Other agencies mentioned as operating the dental service for indigent pupils are the social service center, the variety club, the health unit dental club, and the university clinic. Usually the agency operating the service pays the cost of it; however, 2 of the clubs offering the clinics draw the funds from the community chest, and 2 of the school dental clinics are supported with funds supplied by the PTA. Three of the school clinics make nominal charges of 25 cents to \$1 per sitting.

A County Program in Mississippi

Washington County, Miss., has a county-wide program for grades 1 to 12 made effective by thorough cooperation of the county health department, the schools, and the dentists of the county. Four schools in Greenville, the county seat, and four rooms in county schools achieved 100 percent corrections. A total of 781 pupils had their teeth cleaned and 438 home visits were made. These results were achieved through the following program:

1. Dental examination is made of all pupils who do not present dental certificates; a check on brushing technique is made of those who do have dental certificates.
2. Charted notices of defects are sent home to parents.
3. Home visits are made on cases where mouths are in very poor condition or where home care is completely lacking.
4. Teeth are cleaned for those whose gums are inflamed, bleeding, or sore.
5. Principals permit pupils to have dental appointments during study hall or gymnasium periods in the communities having resident dentists.
6. In communities having no resident dentist, notices are sent home to parents asking if they want the corrections made at school or if they prefer to have them made by the family dentist; the cost of treatment at school is indicated. Later a second notice is sent home advising parents of the date when a dentist from a neighboring town will be at the school.
7. A high-school pupil unable to pay for dental corrections may make ar-

rangements with the principal to have his dental work paid for by funds supplied jointly by some local agency (usually the PTA) and the State board of health. Dentists also arrange to do work at reduced rates for families able to pay something but not in position to pay regular rates.

An Industrial Community in Southern Minnesota

Austin, Minn., follows the basic plan recommended by the dental health director in the State department of health. Under this plan each child in the school system from the kindergarten through the twelfth grade is given a card each year which he takes to the family dentist for an examination. The dentist indicates on the card what needs to be done, if anything, and signs the card, which is then returned by the student to the school. The cards are distributed throughout the school year but in only one school at a time. They come in three colors as do the teachers' record sheets—yellow for kindergarten, pink for grades, and blue for high-school students. The cards of each color carry an appropriate letter to the parents explaining the importance of dental health; and there is a statement to be signed by the dentist when the work is completed. Generally the dentist will give the examination free, but the student pays for his own dental care. Those who cannot afford to pay are given free care through a special fund.

With present shortage of dentists, it is impossible for those who remain in practice to take care of school children entirely in the late afternoons and on Saturdays. For that reason, children are sometimes excused from school to have dental work done. The dentists have cooperated very well in preventing the abuse of this privilege, and excuses from schools are signed by the dentist when the pupil leaves his office.

Educational projects are carried on for both parents and pupils just before the cards are distributed. Units on dental health, including tooth brushing, are presented in all of the kindergarten and elementary classes. In the junior and senior high schools the subject is presented through home rooms or through the teachers of subjects taken by all students. Special aids used include "Facts About Teeth and Their Care,"

"Your Child's Teeth," and "Teeth, Health, and Appearance." Last year for the first time extra educational material was sent to the parents along with the cards. Two schools used "How to Save Teeth and Money," and two schools sent a mimeographed letter.

The means of stimulating interest among high-school students have been varied. At different times, in addition to the teaching of formal dental health units, there have been assembly programs arranged by the local dental society, a speaker from the State board of health, films, and posters. Pupils from the public-speaking classes have appeared before student groups and a student council representative spoke over the public address system. There were also releases in the school and local papers.

A Mobile Dental Trailer In Louisiana

The Caddo-Shreveport (Louisiana) Health Unit and the Caddo Parish School Board jointly supply a mobile dental trailer fully equipped and staffed with dentist and assistant to make regular trips to the schools, public and private, throughout the parish. A plan is followed of rapid examination of all pupils. The findings are recorded and a notice sent to the parents. All those able to pay for the necessary dental service are referred to their family dentist for corrections. Those unable to pay are given treatment in the mobile unit.

A Follow-up Program In Kansas

In Kansas City, Kans., the president of the local dental society arranges the inspection schedule for dentists in the schools. This plan for examination works so well that the schools can give their undivided attention to the all-important problem of getting the student and his parents to realize the importance of dental corrections. Following are some of the methods used in arousing more interest in dental hygiene and thereby bringing about a greater number of corrections:

1. Written essays on the subject in English classes.
2. Oral essays in the speech and English classes.
3. Latest books and literature available in the library.
4. Emphasis on good teeth during Health Week.

Dental Program Widened

The American Dental Association early in 1943 established what has become known as the Physical Fitness Dental Program Committee. This committee during the past 2½ years has been active in promoting the cause of better teeth among high-school pupils, especially among those who soon would be in the armed services or would enter upon wartime employment. The membership of the committee, four from the Dental Association membership and two from the education field, has been as follows:

Leon R. Kramer, director, Division of Dental Hygiene, Kansas State Board of Health, Topeka, Kans., *chairman*.

Norman H. Denner, practicing dentist, Cleveland, Ohio.

Vern Irwin, director, Division of Dental Health, Minnesota Department of Health, Minneapolis, Minn.

J. A. Salzmänn, practicing dentist, New York, N. Y.

Harold C. Hunt, superintendent of schools, Kansas City, Mo.

Carl A. Jessen, senior specialist in secondary education, U. S. Office of Education, Washington, D. C.

With the close of the war the Physical Fitness Dental Program Committee is widening its horizons to include all pupils in the schools and those of preschool age as well. The committee has also expanded its membership by the addition of two persons representative of parent groups and of the very young child:

Mrs. James C. Parker, Grand Rapids, Mich., National Congress Parents and Teachers.

Frank C. Neff, Kansas City, Mo., American Academy of Pediatrics.

In the article on *Dental Programs in Local Schools*, Mr. Jessen reports results of a study made by the Office of Education for the Physical Fitness Dental Program Committee. The specific programs described have been selected because they illustrate various significant practices and conditions with a minimum of duplication.

5. Slogans posted from time to time on the school bulletin board.

6. Display of posters made in the school art department.

7. Films shown in the health classes.

8. Articles in the school newspaper.

9. Announcements in PTA meetings of results of dental program.

10. Excuse of students for dental appointments upon presentation of form card filled out by the family dentist.

A Well-established Program in Ohio

The Cincinnati public schools have had a dental service for elementary school pupils in operation continuously since 1911; dental service for high-school students was begun in 1941.

The service includes, in the first place, examination by the dental hygienist once each year. The examination is conducted carefully for the smallest defects, but it is purely a search for defective teeth; diagnosis and corrections are left to the family dentist. Dental conditions needing attention are brought to the attention of parents

and a cumulative record is kept in the school showing the dental condition of the student from year to year. At the time of examination, comparison is made with the previous year's findings; thus a record is made of any work which has been done since the former examination.

Follow-up of health examinations, which include dental examinations, is carried on through the physical education department. Each physical education teacher has a record of the defects of every student in his classes and works for their correction in close cooperation with the nurses employed by the board of health. Reports are made to the nurses of all defects that have been corrected as well as of those that have not been corrected.

The first free dental clinic was established in Cincinnati in 1911. Last year over 33,000 operations were performed for nearly 4,000 patients. Eligibility for clinical treatment is determined by weekly income of the family in relationship to the number in the family.

A Large City on the Atlantic Seaboard

In Baltimore, Md., the health service for high schools is operated under the educational authorities, while elementary school health service is the responsibility of the city health department. The high-school service provides an examination each year of each student in grades 7 to 12 by a school physician. Dental defects are reported to students and parents, and the regular follow-up to secure corrections is begun. The features, time-schedule, and sequence of the follow-up vary somewhat from school to school but fundamentally consist of:

1. Notification form sent to parents regarding defect. This is signed and returned within 3 to 5 days indicating contemplated action.

2. Conference of student with nurse 2 to 4 weeks after return of notification form.

3. If correction has not been started, a special letter is sent to parents, followed by a nurse-student conference.

4. During this time the teachers of physical education who are informed of all defects:

- a. Urge students to have defects corrected.

- b. May reduce marks in physical education because of uncorrected defects.

- c. May refuse to allow students with uncorrected defects to play on teams. This is invariably done when a misplaced or decayed tooth may cause self injury in contact games.

5. Uncorrected cases are referred for special action to counselors, vice-principals, or principals.

6. Arrangements are made for some cases to go to dental clinics of the University of Maryland where the charges are nominal.

A Well-coordinated New England Program

In Holyoke, Mass., the dental program was developed through aggressive and well-coordinated cooperation of educational authorities, health officials, members of the dental society, the council of social agencies, and the woman's club. Preliminary work was done in meetings with teachers and pupils and through evening meetings with parents. Films were shown, radio broadcasts were arranged, posters were displayed, school assemblies were held, projects were launched in science,

home economics, art, and speech classes. For a month prior to the issuance of dental cards to pupils, there was a daily 15-minute discussion on teeth, using materials supplied by the State department of health, the State department of education, and advertising departments of food and dental companies. Holyoke was made dental conscious.

The result was that when the cards were distributed, dental offices were swamped with requests for appointments. Within a 3-month period over 80 percent of the school pupils had been to their family dentists. In later years, the cards have been given out to one school at a time in order to distribute the dental work for pupils more evenly throughout the year.

By the end of the school year, the remaining 20 percent of the pupils had been examined. This resulted from the assignment by the president of the dental society of dentists to the various schools for the examination of these pupils. Also, by the end of the year 80 percent of the pupils had had defects corrected or had made appointments to have them corrected. This was brought about by careful follow-up under the direction of the physical education department. Interviews with individual pupils played an important part in this follow-up.

In recent years the cards have been given out by section teachers who are also responsible for checking on the return of cards. A primary objective of the Holyoke program is to establish the habit of regular visits to the dentist—a habit that will likely persist through life.

The chairman of the Holyoke dental program submits the following viewpoints growing out of his experience:

- "1. There must be a good program in the elementary and junior high schools in order to have a good program in the senior high school.

- "2. The superintendent of schools must furnish the spark to ignite the whole program.

- "3. The principal of the high school must lend full-hearted support.

- "4. Some delegated person of the faculty who is health-minded should be appointed to see that the program is capably administered.

- "5. Section teachers must be impressed with the fact that in addition to their own subject which they teach, health is still the first cardinal objective of secondary schools.

- "6. The local dental society must assume its responsibility and must be converted to the idea that there is an educational aspect of dentistry as well as a remedial one.

- "7. Cooperation is the secret of success: Pupils, parents, teachers, principals, superintendent of schools, and dentists must each assume their respective obligations in the functioning of the dental program."

Feeding Nursery School Children

Teachers and parents are becoming increasingly aware of the importance of providing the foods necessary to meet the nutritional needs of children, especially during preschool and early school age.

Among recent publications which should be helpful to persons responsible for child feeding programs is a bulletin issued by the Division of Instruction, Alabama State Department of Education entitled *Feeding Children in the Nursery School*. It is to be used as a guide by teachers or parents in planning menus served in the nursery schools or at home.

The pamphlet contains helpful suggestions on meeting the nutritional needs of the child, encouraging good food habits, buying, storing, and preparing foods for young children, guides for menu planning, charts on size of portions, time table on vegetable cookery as well as other useful information. A large section of the bulletin contains recipes for quantity cookery which have been tested in the nursery schools in Alabama.

Members of the staff of the School of Home Economics, University of Alabama, and the Supervisors of Home Economics and Extended School Services of the Alabama State Department of Instruction participated in the preparation of this bulletin.

Copies of the bulletin (No. 3) may be obtained by writing State Department of Education, Montgomery, Ala. Single copies are 35 cents; in lots of 10, they may be purchased for 30 cents each.

Bibliography of Science Courses of Study

IN pursuance of the policy to issue from time to time bibliographies of courses of study received by the U. S. Office of Education Library, the second installment of a unit of science courses is presented. The first installment, appearing in the June 4, 1945, issue of "Education for Victory" listed courses of study in elementary school science; most of those here given are of secondary school grade. Helen K. Mackintosh, Specialist in Elementary Education, and Carl A. Jessen, Specialist in Secondary Education, prepared these bibliographies.

No generally accepted plan for classification of secondary school science courses exists; sometimes science courses for junior high school are grouped together, sometimes biological and physical sciences are issued separately, sometimes each science subject has its own separately issued course. Because of this situation no plan of classification has been followed except to make the list alphabetical by States.

Courses of study listed are not available for purchase from the Office and only those marked with an asterisk (*) are available for interlibrary loan from the Office Library. Requests for such loans should be made by the local library and should be addressed to the U. S. Office of Education Library, Washington 25, D. C.

Secondary School Level

CALIFORNIA

56. San Diego County. *Science on the Secondary School Level*. Curriculum Department. November 1944. Mimeographed. 114 p.

The Bulletin opens with a discussion of the purposes of science and the placement of science subjects in the secondary schools (grades 7-14) of San Diego County. Then follow brief descriptions of science courses as taught in the several secondary schools of the county. Each description is developed under the following heads: 1. Main objectives. 2. Content of course. 3. Textbook used. 4. Principal supplementary materials used. Bibliographies of textbooks, workbooks, curriculum materials, and books for teachers of science close the bulletin.

FLORIDA

57. Florida. State Department of Education. *A Wartime Course in Physics*. Tallahassee, The Department, 1943. 125 p. (Bulletin No. 42.)

This course of study, as its title indicates, stresses wartime applications of physics. The "essential concepts" of physics are presented with some textual comment and frequent illustrations. Much of the laboratory work is based upon the physics principles present in the automobile engine; a considerable amount is based on other easily constructed laboratory apparatus; some of it requires more elaborate equipment. The course is practical in its viewpoint and rich in suggestion.

INDIANA

*58. Indiana. State Department of Public Instruction. *Digest of Courses of Study for Secondary Schools of Indiana*. Indianapolis, The Department, 1944. 247 p. (Bulletin No. 151.)

Deals with the principal subjects of the high-school curriculum. The science portion includes semester by semester suggestions on objectives, basic content, and teaching procedures for general science (grades 7, 8, and 9); biology (9 or 10); botany, zoology, and physical science (10 or 11); physics, chemistry, advanced science, and physiography (11 or 12).

*59. ————. *Guide for Teaching Applied Physics in Indiana High Schools*. Indianapolis. The Department, 1943. 145 p. (Bulletin No. 159.)

Deals with a full year of physics study, 14 units in the first semester and 12 units in the second semester. With each unit are to be found an outline of the content, demonstration and teaching suggestions, students experiments, and important relationships.

*60. ————. *The Indiana Plan for Emergency Physics in High Schools*. Indianapolis, The Department, January 1943. 53 p.

This is a one-semester course in physics designed to supply the most essential materials of high-school physics to pupils who are entering the armed forces or war industry. Week by week suggestions are given for demonstration, student experiments, and important relationships to be dealt with in this accelerated course.

MASSACHUSETTS

61. Malden. Malden Public Schools. *Course of Study in Science for Junior High School*. By Robert W. Perry, Di-

Courses of Study

The U. S. Office of Education Library is a depository for all types of courses of study from many States, cities, and counties throughout the country.

In 1938 the publication, *A Survey of Courses of Study and Other Curriculum Materials Published Since 1934*, Bulletin 1937, No. 31, was issued. This bulletin summarized course of study materials received through 1937. No follow-up study has been made from 1938 to the present time. In 1944 the Office of Education Library issued a request for courses of study from 1941 on. This fact determined the choice of the date, 1941, as the starting point for a series of bibliographies in curriculum fields that are of current interest to teachers and curriculum committees. These have appeared from time to time in *Education for Victory* and are continuing in *SCHOOL LIFE* through the cooperative efforts of the U. S. Office of Education Library and specialists in the various service divisions.

The listing of courses in any bibliography of this series will be limited to those received by the Library in response to its request for material, or those sent in voluntarily. Courses of the following types are not included: (1) those in outline form which constitute merely directions for work, (2) lesson assignments or outline based on a specific text or texts, (3) those consisting largely of quotations from various authorities or from course of study sources, (4) those which are not dated.

rector of Science. 1941. 129 p. Mimeographed.

Principally the course consists of detailed suggestions for teaching 18 general science units, 8 in the eighth grade and 10 in the ninth. While the terminology and treatment are suited to the nature of the unit, the following features are usually present: A considerable number of stimulating questions and statements drawn from everyday observation of scientific phenomena; suggestions for demonstrations in great variety, most of them with simple apparatus; ideas for pupil projects and reports; a list of the apparatus needed for carrying on the demonstrations; a list of references for teachers and pupils.

MINNESOTA

62. Minneapolis. Public Schools. *Handbook on the Teaching of Science*. 1941. 109 p.

For grades 7, 8, and 9, developed by committees of teachers, consists of 29 suggested units related to development of natural resources, conservation of human and natural resources, transportation, communication, home life, and health. Each unit is treated under the following heads: Overview, approaches, concepts, activities, evaluation, and bibliography. Many of the units also include lists of materials other than books needed for teaching the course.

MISSOURI

63. Missouri. Department of Education. *Natural Sciences*. Jefferson City, The Department, 1941. 486 p. (Missouri at Work on the Public School Curriculum, Secondary School Series, Bulletin No. 6.)

The course is developed in five sections: General science, biology, advanced physical science, chemistry, and physics. Each section contains a brief introduction and an extensive treatment of illustrative units in the science being studied. Each unit includes: A statement of objectives or purpose; a considerable treatment of such matters as content, problems, teacher procedure, and pupil or learning activities, including provisions for individual differences; tests for mastery; and references. Vocabulary is another feature which is rather generally found with the units. With most of them there is also provided opportunity for teacher evaluation of the unit.

NEBRASKA

64. Nebraska. Department of Public Instruction. *Physics and Mathematics for High Schools*. Lincoln, The Department, 1942. The Nebraska High School Improvement Program, Reports of Committees on Physics and Mathematics. 66 p. (Bulletin No. 6.)

The physics portion of the bulletin occupies 36 pages. Of 7 units in the physics course the first 3 are on the airplane, meteorology, and the internal combustion engine; the others are on electric power, electric communications, optical instruments, and sound in the air age. Each unit is developed under the following heads: Course outline, basic principles, equipment needed, reference material, and text assignments.

65. ———. *Aviation for High Schools*. Lincoln, The Department, 1942. The Nebraska High School Improvement Program, Report of Committee on Aviation for High Schools. 83 p. (Bulletin No. 5.)

A revision and expansion of a bulletin published the preceding year and used as a basis

for aviation courses by 150 Nebraska schools. Prepared by a committee of Nebraska educators, it offers suggestions for content of 11 units. Reading references, visual aids, and suggested activities are featured.

NEW JERSEY

66. North Arlington. North Arlington High School. *Science—Courses of Study, Grades 7–12*. 1942. Mimeographed.

In grades 7 and 8 the courses for each year cover 18 weeks work in general science and 18 weeks work in health. Beginning with the ninth grade, a year is given to each of the following: General science, biology, chemistry, and physics. For the most part the courses consist of content presented in outline form.

67. Tenafly. Tenafly Public Schools. *Course of Study—General Science*. 1944. 14 p. Mimeographed.

68. ———. *Course of Study—Biology*. 1944. 5 p. Mimeographed.

69. ———. *Course of Study—Chemistry*. 1944. 10 p. Mimeographed.

70. ———. *Course of Study—Physics*. 1944. 12 p. Mimeographed.

The four courses of study were prepared by different teachers. Each contains a statement of objectives and an outline of the content of the course. The courses in general science, chemistry, and physics have bibliographies. The chemistry course includes a list of laboratory exercises and a typical lesson plan.

OHIO

71. Cincinnati. Cincinnati Public Schools. *Try-out Course of Study in General Science, Grade Nine*. 1943. 40 p. Curriculum Bulletin 101. Mimeographed.

72. ———. *Course of Study in Biology, Grades Nine and Ten*. 1943. 105 p. Curriculum Bulletin 102. Mimeographed.

73. ———. *Try-out Course of Study in Chemistry, Grades 11–12*. 1943. 263 p. Curriculum Bulletin 103. Mimeographed.

74. ———. *Try-out Course of Study in Physics, Grades 11 and 12*. 1943. 75 p. Curriculum Bulletin 104. Mimeographed.

75. ———. *Instructional Manual—Aeronautics and Navigation, Grades 11 and 12*. 1943. 70 p. Curriculum Bulletin 100. Mimeographed.

Three of the courses (general science, chemistry, and physics) are labeled as "try-out" courses; indications are, however, that the committees preparing them have been active for considerable periods of time.

Generally there are one or more chapters dealing with outcomes, objectives, methods,

references, and general considerations relating to the science studied. Principally each course gives attention to the units which are to be taught. These are as follows:

General Science: 16 units, of which one is developed fully as a sample.

Biology: 10 units, each treated under outcomes, concepts, approaches, carrying on the unit, and references, together with a section under the heading "Emphases related to the war" where applicable.

Chemistry: 20 units in the first semester, giving with each unit outline, procedure, presenting the topic, demonstrations, and teaching aids and suggestions; 42 units in the second semester—14 on common elements and their compounds, 11 on chemistry of the individual, 9 on chemistry of the home, and 6 on chemistry of the community.

Physics: 7 units, with special emphasis on concepts and outcomes, safety practices, and outlines of the unit, including laboratory work and equipment.

Aeronautics and Navigation: The pre-flight courses are developed as a 2-year sequence: Aerodynamics, controls, engines, instruments, and meteorology are stressed in the first year; aerial navigation, including piloting, radio flying, dead reckoning, and celestial navigation are reserved for the second year. Extensive lists of books and visual materials are included.

76. Cleveland. Board of Education. *Course in Mathematics and Physics of Aeronautics*. 1942. 23 p. Mimeographed.

Outlines are presented for eight units of aeronautics study. A parallel column arrangement gives emphasis to the content in mathematics and physics courses which has especial bearing upon aeronautics.

77. Orville. Orville Public Schools. *Course of Study—Orville High School—Geography and Sciences*. 56 p. Processed.

The science part of the course of study gives a total of 48 pages to elementary science, physiology, nature study, general science, biology, and chemistry; the first 3 of these are planned for grade 8, the remaining 3 for grade 9 and following grades. Objectives, scope of subject matter, supplementary activities, time allotments and grade attainments, methods, provisions for individual differences, and references are treated with each science subject.

OREGON

78. Oregon. State Department of Education. *Applied Physical Science*. Salem, The Department, 1941. 16 p. Mimeographed.

This course is designed for pupils who do not expect to continue their formal schooling beyond high-school graduation; it is conceived as a 1-year alternative to regular physics and chemistry courses. There are 6 units em-

phasizing the scientific features of modern machines, electricity and electrical appliances, light in modern living, and the contributions of chemistry to modern living. Since the course is regarded as tentative, criticisms by those who use it are solicited.

79. Corvallis. Corvallis Public Schools. *Curriculum Handbook, Grades VII-IX*. 1941-42. 116 p. Mimeographed.

Six pages are given to junior high school science. The units (11 in grade 7, 9 in grade 8, and 12 in grade 9) are listed very briefly. A feature of the course is the listing in a column parallel to the list of units the coordinated experiences in other subjects, such as English, art, music, mathematics, industrial arts, and so forth.

PENNSYLVANIA

80. Mt. Lebanon, Pittsburgh. *Melton Junior High School Science Course of Study—9th Grade*. 1944. Unpaged. Mimeographed.

Outlines are presented of units on heredity, energy, matter, and sound for the first semester and on simple machines, light, and electricity for the second semester.

81. ——— Mt. Lebanon Senior High School. *Course of Study in High School Chemistry*. 1942. 67 p. Mimeographed.

82. ——— *A Course of Study in Physics*. 1942. 31 p. Mimeographed.

The chemistry course opens with a listing of objectives and then gives detailed outlines of content for 19 units with references for each unit. Similarly, the first half of the physics course consists of a statement of objectives and one-page outlines of 9 units. Significant are the suggestions for teaching procedures and for laboratory activities together with more detailed development of a sample unit appearing in the last 18 pages of the physics course.

83. Pittsburgh. Pittsburgh Public Schools. Department of Curriculum Study. *Aeronautics Course Outline of Topics from Aeronautics I-II with a List of Aids to Perceptual Learning*. 1943. 19 p. Mimeographed.

84. ——— *Supplement to the Aeronautics Course of Study with a List of Aids to Aircraft Identification*. 1943. 20 p. Mimeographed.

Eight units in aeronautics are presented in outline form. A feature of the course is the extensive reference list of visual aids. The supplement on aircraft identification is complete as of the time of its appearance.

RHODE ISLAND

85. Providence. Department of Pub-

lic Schools. *Course of Study in General Science, Grades 7-8-9*. 1943. 95 p. Mimeographed.

This course presents 17 units to be included in the general science work of grades 7, 8, and 9. Prepared by teachers and curriculum experts, each unit is dealt with under the following heads: Objectives, references, content, major problems, understandings, and suggested demonstrations. The course is rich in suggestion.

TEXAS

86. Orange. Orange Independent School District. *Tentative Course of Study in General Science, Chemistry, Physics, Aviation*. 1943. 189 p. Mimeographed. (Curriculum Bulletin No. 232.)

87. ——— *Tentative Course of Study in Biology*. 1944. 60 p. Mimeographed. (Curriculum Bulletin No. 333.)

An introductory chapter and 4 additional chapters on general science (10 units), chemistry (13 units), physics (12 units), and aviation (7 units), make up this publication. Each unit is developed under the following heads: Desired outcomes, overview, outline of content, suggested activities, and bibliography. A course in biology (7 units) has the same characteristics as the other courses, but is bound separately.

UTAH

88. Utah. Department of Public Instruction. *Junior High School Science. Teachers' Guide*. Salt Lake City, The Department, 1941. 36 p. Mimeographed.

89. ——— *Biology. Teachers' Guide*. Salt Lake City, The Department, 1941. 15 p. Mimeographed.

90. ——— *Chemistry. Teachers' Guide*. Salt Lake City, The Department, 1941. 15 p. Mimeographed.

91. ——— *Physics. Teachers' Guide*. Salt Lake City, The Department, 1941. 18 p. Mimeographed.

Together these 4 publications cover the science course of grades 7 to 12. There are 8 suggested units for grade seven, 9 units for grade eight, 10 for grade nine, 12 for biology, 12 for chemistry, and 9 for physics. Each unit is developed under the following heads: Purpose, generalizations, outline, suggested activities, and references. It is emphasized that the courses are to be considered as guides to teachers, not prescriptions. Consequently, instructors are urged to adapt the courses to local needs and conditions.

WASHINGTON

92. Washington. Department of Education. *Temporary Guides for the Junior High School Curriculum*. Olympia, The Department, 1944. 116 p. (Instructional Service Bulletin No. 14.)

The continuity of the science course through grades 7, 8, and 9 is emphasized by having the same units persist through two or more grades with content in advanced units based upon content already learned in earlier grades. Thus a unit on *What Science Is* runs through 7th and 8th grades; *The Earth Is a Part of a Great System* occurs in all three grades; *The Changing Surface of the Earth* appears in grades 7 and 8; and so with other units. Goals, suggested activities, and references are given with each unit.

Elementary and Secondary Levels

ARKANSAS

93. Arkansas. State Department of Education. *Nature Study and Conservation. Suggested Instructional Units for Arkansas Elementary and Secondary Schools. Elementary Section*. Bulletin No. XI. Arkansas Cooperative Program to Improve Instruction. Little Rock, The Department, 1942. 141 p.

This bulletin was prepared in tentative form at the University of Arkansas in 1940, was tried out in a selected group of schools in 1940-41, and was completely re-written in the curriculum workshop in 1941.

In the introduction, need of conservation, definition, objectives, legal requirements, organization, and scope of the course of study in natural resources are briefly treated. Helpful suggestions are offered for putting the program into action. An interesting chart shows the progressive growth of the conservation concept from preschool through adult life together with other ideas. Instructional units for primary grades include "Our Garden," "A Journey Through the Woods," and "Our Wild and Tame Animal Friends." Four instructional units are developed for intermediate grades. Units are developed with attention to objectives, setting, suggested approaches, suggested pupil activities that are practical and which should be successful, evaluation of pupil outcomes, and a bibliography including films as well as books.

The Appendix contains suggestions on how to conduct a field trip, directory of publishers, directory of agencies engaged in conservation activities.

94. ———. Secondary Section. Bulletin No. XI. *Arkansas Cooperative Program to Improve Instruction*. Little Rock, The Department, 1942.

The first section of this course is similar to that for the elementary level. The second section is devoted to problems involved in putting a program of conservation into action. There are six instructional units suggested for the junior high school and six for the senior high school. The general plan of presenting these is similar to that of the elementary level. An appendix is included with the same content as for the elementary bulletin.

CALIFORNIA

*95. California. State Department of Education. *Aviation Education in California Public Schools*. Vol. 13, No. 5. Sacramento, The Department, 1944.

This bulletin combines reports of committees at the elementary, secondary, and junior college levels.

For the elementary school, there is a summary of recommendations followed by the more detailed statements concerning issues and problems, basic knowledge and understandings regarding relationships between aviation and other current problems; the organization, program, subject matter, materials of instruction, and training of teachers for aviation education.

At the secondary-school level in addition to items mentioned for the elementary level there are listed general objectives, discussion of courses in the science of aeronautics, services of State department of education, the flight-experience program, and pilot training.

MICHIGAN

96. Allegan. Public Schools. *Curriculum Guide for Allegan Public Schools*. 1943. 50 p. Hectographed.

This guide was prepared by committees composed of the entire faculty, and consists of a series of reports on the major subject fields. The report on science covers the entire field from kindergarten through 12. Following a brief statement of objectives there are presented a set of guiding principles for judging the suitability of activities, a statement on the importance of method, evaluations, recommended practices of instruction, suggested science activities for kindergarten and grades 1-3, a section on science instruction in grades 4, 5, including general recommendations, list of suggested units, and a sample unit. The high-school outline of courses is developed in keeping with the elementary program.

NORTH CAROLINA

97. North Carolina. State Department of Public Instruction. *Science for the Elementary School*. Publication No. 227. Raleigh, The Department, 1941. 115 p.

Starting out with a discussion of the place of science in the elementary school, the bulletin then reviews practices in the existing program in the State. Objectives, generalizations, and concepts are discussed in relation

to a balanced program based on the environment in which the child lives. A list of purposeful activities applicable to many situations numbers 45 items. A helpful section is devoted to suggested experiments numbering 38, with suggested sources of equipment and materials. There are suggested unit topics for each of grades 1-7 inclusive, usually 9 to 12 per grade, which are then developed briefly with references and essential understandings for each.

There is a list of inexpensive, reliable, science source materials and lists of references for teachers and children.

98. *A suggested Twelve-Year Program for the North Carolina Public Schools*. Raleigh, The Department, 1942. 293 p.

A brief section on science emphasizes plans for the eighth grade as the added year in a 12-year public-school program which has previously consisted of 11 grades. The list of suggested units is given for years I-VII. For the eighth year a series of 7 units is proposed which includes a list of essential understandings and suggested references. This course is designed to tie into the existing course in elementary science and to lead naturally into the science program for secondary schools, mentioned briefly in this publication, and in detail in a separate bulletin.

PENNSYLVANIA

99. Yeadon School District. Board of Education. *Course of Study in Science*. 1941. 28 p. Mimeographed.

This course is prepared for the guidance of teachers of grades 1, 2, 3; grades 4, 5, 6; junior high school; and senior high school. The builders of the course base their suggestions upon the premise that science is primarily a method of thinking which contributes to the development of the child.

The principal aims of science teaching, curriculum principles, science concepts, the scientific attitude, desirable social attitudes, types of activities, laboratory versus demonstration, solution of problems, pupil's notebooks, textbooks are discussed in a general way. A brief outline of content is given for each grade 1-12.

Functional School Buildings Emphasized

We may expect the schoolhouse of the future to be as functional as airplanes, mechanical refrigerators, radios, and electric clocks, Prof. William C. Reavis told the conference for executives of public and private schools meeting recently at the University of Chicago. "Functional classrooms, providing space for study and group instruction, constructive activities, committee work and audio-visual aids for

groups and individual students, must replace the standardized classroom if the schoolroom is to keep pace with education."

The Chicago educator further stated that, "Planning and construction of a school building is a cooperative enterprise requiring the services of citizens, school patrons, teachers, school administrators, board members, architects, and specialists in education.

"The concept that the school is a community institution and should serve adults as well as children of a prescribed age during certain hours of the 5-day school week is now generally accepted.

"This concept has necessitated the enlargement of school sites, the provision of parking space, inclusion of rooms for multiple use, and special space facilities in some instances for the exclusive use of community groups."

At the same conference, Architect Lawrence B. Perkins stated that, "Gothic pinnacles had an engineering reason for being in the cathedrals of the 12th century. Today they merely add to the burden of maintenance. When we build today, we pour concrete and frame steel for plain functional buildings."

In order to assure the functional planning of community institutions as visualized at the Chicago conference, each educational plant must be tailored to fit the specific educational program to be accommodated. A functional building does not just happen. It is the result of long-time and careful cooperative planning by educators and designers.

It was emphasized that the *first step* in plant planning is the determination of the type, scope, and content of the programs of school and community services to be provided. The *second step* is to determine the location, size, and type of attendance or housing units, and to group these into economical and effective administrative units. The *third step* is the cooperative planning of individual projects in terms of the specific services to be accommodated and modern building materials.

Preparing Teachers and Leaders for Education of Veterans

THE following article is by Leland P. Bradford, Chief of Training, Federal Security Agency. The article was developed partially as a result of the Work Conference in Educational Programs for Veterans held last spring at the NEA headquarters, for which Dr. Bradford served as Analyst of the Committee on Adult Education. Dr. Bradford has since become Director of Adult Education Service of the National Education Association.

The problem of providing education for returning veterans, stimulated and encouraged by the GI Bill of Rights is upon us. Of the many million returning servicemen, well over two thirds cannot or will not attend colleges. They will return from the war certain that war is terrible and must not be repeated, but confused as to the many other issues upon which citizens must act. They were thrown into war before their education was completed and they will need educational assistance in adjusting to ways of peace.

The education of these veterans, to say nothing of millions of other adults who will face almost as great transition from war to peace, will require many teachers and leaders. There are now far too few such teachers and leaders properly prepared. Because the education of veterans is adult education, teachers of veterans must be trained in the methods of adult education. The veterans obviously will not return to sit in school with children and youth and to classes conducted by methods traditionally used with children.

Veterans will generally want part-time and evening classes covering a variety of subjects of immediate importance and use led by teachers skilled in working with adults.

Sufficient Competent Teachers

This, then, is the problem. All of the publicity and plans for veteran's education will be largely futile unless there are sufficient competent teachers to carry out the basic task of instruction and leadership. The training of teachers in adult education for veterans

rests upon both teacher education and the local school administrator. But to a large degree initiation and furtherance of such training are responsibilities of the colleges.

The immediacy of the problem demands that planning for training be quickly initiated. It demands, too, that modern methods of training, as yet generally not used by colleges of education or local schools, be adopted to meet this problem. Such training should be developed on both a pre-service and in-service basis, and should be the cooperative function of both training colleges and the local schools.

In planning this training, certain cautions can well be kept in mind. Because the education of veterans is an immediate problem, the training of leaders cannot itself be a long-term process. Nor is this necessary. It is not a problem of preparing college students for a future occupation, but that of giving specific, immediate training to teachers or community leaders to adapt them to the teaching of adults. Again, such training need not and should not be broken into tight logical compartments. Instead of a sequence of units taught by separate specialists in the philosophy of adult education, curriculum construction, principles of adult education, psychology of adult education, techniques, etc., the emphasis should be placed on training leaders to conduct adult classes in the community.

Mutual Acceptance of Responsibility

The following suggestions contemplate the mutual acceptance of responsibility for training of teachers of adult education by colleges and local school systems, and the cooperative carrying out of this responsibility by both groups.

Many adaptations of such suggestions are possible and desirable.

Functions of the teacher-training institution

1. Arouse local schools to the problem of training of teachers of veterans. This may well be the function of the chief State school officer working in conjunction with the colleges. It may

be done by letter or by conference or through the State educational association. A plan for cooperative training could be worked out in a conference or by committee, or could be presented by correspondence to local school officers.

2. Suggest criteria for the selection of local teachers and leaders for the teaching of veterans. The best teachers or potential teaching talent available should be selected. Second- and third-rate teachers will not do. Frequently members of the community experienced in certain areas of concern to the veterans will make superior teachers with a brief amount of training and will be interested in teaching one or more evening classes.

3. Develop short-course training of teachers. Such intensive pre-service training courses can be held either as on-campus courses, traveling institutes held for a period of a few weeks each in various sections of the State, or extension courses held once or twice a week over a period of weeks in various centers in the State. While the training of teachers of adult education should be carried on as a whole, certain aspects of adult education should be stressed.

These are:

(a) *Characteristics of adult education.* The education of adults is flexible, based upon the adult's interest and purpose, and not limited by prerequisites or a set curriculum; courses should have immediate goals and values; courses should be shorter in length; the adult student wants a share in the determination of the content of the course and the direction and conduct of the group; class materials are shorter in form and more immediate in content than the typical textbook; methods of rote learning and memorization are ill-adapted to adults in most instances; and the adult student expects his contributions to be received as the mature thoughts and opinions of an adult.

(b) *Discussion leadership.* A basic method of adult education is that of group discussion. Every teacher of adults should become highly adept in the art and skill of discussion leadership. Major emphasis in pre-service, as well as in-service, training of teachers should be placed upon this skill and the necessary belief in group

exploration rather than teacher-telling.

(c) *Curriculum construction.* Curriculum construction and adaptation is far more of a teacher's responsibility and continuous task than is true where textbooks are widely used, and where changes in courses are infrequent. The teacher of adults must develop the ability to build and continuously modify the course around the interests of the adult students. Because class materials in large part must be developed and secured to meet new problems as they arise, and because a wide use of visual aids will be needed and expected, curriculum construction is a continuous function of the leader of adult groups. A definite part of curriculum construction is skill in securing and developing class materials from current and community sources. Again, the competent teacher of adults is aware of community as well as individual problems and sets the course in the framework of community living.

4. Prepare suggestions and provide assistance to the local school administrator in establishing an in-service training program for teachers and leaders. Obviously the training of teachers will be adequate only when pre-service and in-service training program are closely geared together. Such assistance to the local school administrator should take the form of suggestions for training through periodic staff meetings, group projects and individual supervision.

Staff meetings should be more than the opportunity to conduct business and give orders. They should provide opportunities for the teaching staff, under competent leadership and administration, through group discussions and exploration to grow continuously as teachers of adults. Too frequently, courses in public-school administration and supervision for school officers have placed far too little emphasis upon the development of staff meetings and staff groups. The training of teachers of adults may help to underscore the fact that workshops need not be only annual occurrences held on a distant campus, but rather should be the basis of staff meetings.

5. Provide continuous assistance to the local communities. This may be done by arrangement with the local schools and the staff of the chief State

school officer in which faculty members of the training institution make periodic visits to communities to be of assistance in the local in-service training program. Again, it may be carried out by visits upon invitation. Such invitations will be more freely extended as the pre-service and in-service training programs are worked out jointly by the training institutions and the local schools. In training of public-school teachers there has too rarely been any such mutual planning. Typically, the school of education plans the preparation of the prospective teacher and the local school merely accepts the result.

6. Prepare training manuals and materials for use in the local in-service training programs. Such materials may best be prepared by committees composed of representatives of teachers and administrators from various communities concerned with the problems.

7. Hold occasional conferences for administrators and leaders and acts as a clearinghouse for training ideas and program throughout the State.

Functions of the local school administrator

1. Conduct periodic staff meetings designed continuously to explore all aspects of the program of the education of veterans.

2. Establish working committees or groups of teachers to develop better methods, materials, course content, evaluation, recruitment and publicity.

3. Explore the use of community resources in developing the in-service training program. For example, community leaders in such areas as vocations, home living, parent education, etc., may well be asked to work with teachers concerned with these problems.

4. Institute a program of supervision which as a training device should be less concerned with minor points of criticism and more concerned with securing information about general problems and successful solutions to form a basis for periodic staff or training meetings.

The above suggestions obviously are in skeleton form. They serve, however, to point out that the problems of training of teachers and leaders for the education of veterans is a crucial one and can be solved only if both schools of education, the staff of the chief State school officer, and the local schools work together toward its solution.

Report from Santo Tomas

A recent communication received by Herbert Swanson, specialist in agricultural education, teacher training, U. S. Office of Education, from one of his former students at Iowa State College, describes life in an internment camp at Santo Tomas University in Manila. The writer, I. D. Butler, enclosed a pamphlet issued at the camp which began with these lines:

"After 37 long months, we celebrate our first day of freedom today (February 3, 1945) with the final departure of the Japanese from the city of Manila, and await with bounding hearts our own, our friends, our Allies."

Among other things, the pamphlet states that "a school of approximately 700 children and young people, from primary to college grades, operated with permission but no help from the Japanese and staffed by qualified teachers or by experts in technical fields, was conducted in spite of grave lack of classroom space and shortage of textbooks and stationery."

"A similar number of persons attended special adult classes until prohibited early in 1944."

The pamphlet indicates that as to food, "meat, milk, and eggs were totally absent"; while up to September (1944) inclusive, a gross daily average of one ounce of fresh fish per person was provided; also an average of two small bananas per person per month, and no citrus fruit at all. Green vegetables were almost all supplied by the camp garden."

Geographic School Bulletins

The *Geographic School Bulletins*, published by the National Geographic Society, were resumed for the 1945-46 school year on October 1, the Society has announced. Each of the 30 weekly issues will contain five articles and seven illustrations or maps.

The format of the bulletins is designed so that each article, with illustrations and suggestions for further reading, is a complete unit, detachable for separate filing, for bulletin board use, or for distribution to students in the classroom.

The bulletins may be obtained from the General Headquarters of the Society, Washington 6, D. C. Price is 25 cents for each subscription.

EDUCATORS' BULLETIN BOARD

New Books and Pamphlets

Public Health

Medical Care for Everybody? By Maxine Sweezy. Washington, D. C., American Association of University Women, 1945. 39 p. 15 cents, single copy.

Discusses the health needs of the country, barriers to adequate medical care and the extension of national health insurance; presents arguments for and against Federal health insurance. Contains questions for discussion and bibliography.

The Story of Blue Cross, On the Road to Better Health. By Louis H. Pink. New York, N. Y., Public Affairs Committee, Inc. (30 Rockefeller Plaza), 1945. 31 p. (Public Affairs Pamphlets No. 101.) 10 cents.

Describes the place of voluntary insurance plans in the health program. Reports that the public wants more health protection, doctor bills as well as hospital bills prepaid, preventive as well as curative service, and favors the gradual extension of social security.

High-School Dramatics

Dramatics Director's Handbook. Edited by Ernest Bavely. Revised Edition. Cincinnati 24 (College Hill Station), The National Thespian Dramatic Honor Society for High Schools, 1944. 67 p. Mimeographed. \$1.50.

Designed primarily for those who are new in the field of high-school dramatics; suggests units and activities. Topics include: How to teach high-school dramatics; Organization of the high-school dramatics club; Standards for the selection of plays at the high-school level, and other pertinent information.

English Teaching

Children Learn To Write. Compiled by Fannie J. Ragland. Chicago 21, Ill., National Council of Teachers of English (211 West 68th Street), 1944. 78 p. (Pamphlet Publication No. 7) 50 cents.

Describes how the elementary classroom environment can promote good writing and shows how teachers may provide experiences that stimulate thought and reaction leading to a natural growth in organizing and expressing ideas.

The English Language in American Education. Prepared for the Modern Language Association of America, by Thomas Clark Pollock with the cooperation of William Clyde DeVane and Robert E. Spiller. New York, Commission on Trends in Education of The Modern Language Association of America (100 Washington Square East), 1945. 32 p. 25 cents.

Presents a statement of principles and objectives for English teaching on all levels from elementary school through college. Stresses the possibility of improving the English of the "nonacademic" students, suggests a practical approach to the problems of English teaching, and discusses a program for improved teaching of English and improved training of prospective teachers of English.

Guidance

Proceedings of the Tenth Annual Guidance Conference, Held at Purdue University, November 10 and 11, 1944. Edited by H. H. Remmers. Lafayette, Ind., Division of Educational Reference, Purdue University, 1945. 66 p. (Studies in Higher Education 52) 75 cents.

The papers given at the Conference dealt with a variety of guidance problems including wartime and postwar adjustments.

Education and the Public

Public Understanding of What Good Schools Can Do. By Robert S. Fisk. New York, Bureau of Publications, Teachers College, Columbia University, 1944. 86 p. \$1.75

States that education must move forward through the cooperation of educators and the public. Suggests a program based on the thesis that once parents and the general public are aware of what good schools are doing elsewhere they will demand the equivalent quality of education for their own children.

Postwar Problems

Documents on American Foreign Relations. Vol. 6, July 1943-June 1944, Edited by Leland M. Goodrich and Marie J. Carroll. Boston, World Peace Foundation, 1945. 725 p. \$3.75.

Includes official statements and other documentary material from July 1943 through June 1944 and is concerned not only with the prosecution of the war but also with such matters as international security, currency stabilization, production of food and problems of nutrition, and many other agreements bearing upon postwar problems.

Vocational Education

The Expansion of Vocational Education in Nebraska. By Harry E. Bradford. Lincoln, The University of Nebraska, 1945. 82 p. (Contributions to Education No. 22) 50 cents.

Presents the results of a study made for the purpose of assembling data which will be helpful in making plans for the postwar expansion of vocational education in Nebraska.

Recent Theses

The following theses are on file in the Library of the Office of Education and are available for interlibrary loan.

Reading

The Analysis of Kindergarten Children's Speaking Vocabulary in Relation to First Grade Reading Needs, by Elizabeth L. Enright. Master's, 1943. Boston University. 90 p. ms.

Constructs and evaluates tests for determining the relative knowledge of kindergarten children in each of the experience fields.

An Analysis of Mental Imagery in Children's Silent Reading, by Vida S. Clough. Master's, 1943. Boston University. 131 p. ms.

Attempts to construct a scale to measure the extent and degree of mental imagery in the silent reading of pupils in grades 4-6.

A Content Analysis of Selected Case Studies of Reading Disability, by Clarence H. Shultz. Master's, 1943. University of Cincinnati. 181 p. ms.

Presents case studies of 10 pupils in elementary school and describes methods used in overcoming their disabilities.

An Evaluation of Reading Devices Used in a Fifth Grade, by Vivian R. Sweeney. Master's, 1944. University of North Dakota. 65 p. ms.

Describes an experiment in which outline drill, recall drill, word drill, and extensive reading were used with 35 fifth-grade children in an attempt to improve their reading ability.

An Evaluation of the Effect of Specific Training in Auditory and Visual Discrimination on Beginning Reading, by Helen A. Murphy. Doctor's, 1943. Boston University. 216 p. ms.

Describes exercises for developing auditory and visual discrimination and their use with beginning readers.

An Evaluation of the Relative Appeal of Reading Assignments, by Catherine L. Lyons. Master's, 1943. Boston University. 50 p. ms.

Analyzes responses of 300 boys and girls to an interest test designed to measure their interest in various kinds of reading assignments.

The Historical Development of the First Grade Reading Program Used by the Sisters of Mercy in the Archdiocese of Cincinnati, by Sister Mary B. Tighe. Master's 1944. University of Cincinnati. 85 p. ms.

Traces the growth and development of the instructional program in first-grade reading from 1883 to date.

The Improvement of Reading Comprehension in a Seventh Grade, by Sister Ursula Harmeyer. Master's, 1944. University of Cincinnati. 65 p. ms.

Develops a program for improving reading comprehension.

Marks of Readable Style: A Study in Adult Education, by Rudolf Flesch. Doctor's, 1943. Teachers College, Columbia University. 69 p.

Studies the language elements that influence comprehension difficulty in reading based on statistical experiment using reading test lessons and magazine articles. Develops a readability formula for use in estimating the comprehension difficulty of a given test.

Mechanical Methods for Increasing the Speed of Reading: An Experimental Study at the Third Grade Level, by Eloise B. Cason. Doctor's, 1943. Teachers College, Columbia University. 80 p.

Studies the use of reading materials marked to emphasize phrasing and material supplemented by sheets reproducing the selection with spaces between the phrases. Describes the use of the Matronoscope.

Motivation Through Basic Reading: A Study of the Motivational Content of Readers Used in Elementary Schools, by Ernest V. Estensen. Doctor's, 1943. University of North Dakota. 366 p. ms.

Defines economic, nationalistic, militaristic, international understanding, and religious motivations. Studies four sets of basic readers used in the elementary schools of the United States from 1930-1940, and compares them with the McGuffey readers, and with a series of basic Danish readers. Recommends that the readers of every nation be examined periodically to determine the trend of thought being developed in children.

Relationship Between Variations in Silent Reading Ability and Mental Ability, by E. Carlton Abbott. Doctor's, 1943. University of Pennsylvania. 117 p.

Describes an experiment conducted with 108 ninth-grade pupils in the Lansdowne, Pa., high school between September 1940 and June 1942, to whom an intensive and extensive reading improvement program was given. Indicates that their silent reading ability improved nearly twice the normal expectancy.

Visual and Reading Problems Affecting Individual Adjustment, by Earl A. Taylor. Doctor's, 1943. New York University. 200 p. ms.

Presents a new approach to the solution of the reading problem.

Courses of Study

The following courses of study were recently received in the Office of Edu-

cation Library. They are not available for loan or distribution by the Library, but those interested in copies should inquire of the school system concerned.

Alpena, Mich. Public Schools. *Course of Study—Elementary Grades*. 1943. 71 p. mimeographed.

East Greenwich, R. I. Public Schools. *A Game Program for the Elementary Schools*. 1944. 97 p. mimeographed.

Mamaroneck, N. Y. Public Schools. *The Language Arts Course of Study*. Union Free School District, no. 1, 1944. 65 p. mimeographed.

Orange, Texas. Independent School District. *Tentative Course of Study in Fundamentals of Speech*. 1944. 221 p. mimeographed. (Curriculum Bulletin no. 314)

Philadelphia, Pa. Public Schools. *Foods and a Balanced Diet; Science Helps us to Understand and Practice Better Food Habits*. 1944. 24 p. mimeographed.

Tenafly, N. J. Public Schools. *Course of Study—Library, Grades 1-6*. 1944. 6 p. mimeographed.

sion of the liberal and humane tradition into our entire educational system. Our purpose is to cultivate in the largest possible number of our future citizens an appreciation of both the responsibilities and the benefits which come to them because they are Americans and are free."

* * *

"Rigorous exactitude does not allow for continuity and change. In education, as in life, we cannot flee from distressing complexity and uncertainty to the cozy neatness and comprehensiveness of dialectic. Scholasticism gave modern civilization the vital principle of orderliness. But intellectual orderliness can, when misplaced, be fatal to either order or justice in the changing society that is our heritage and responsibility. What we can hope for in the teaching of the social studies is not a mathematical or logical precision, but rather an understanding based upon careful, even rigorous, study of some of the stubborn facts which have gone into the making of our social order, as well as a consideration of the theories and principles implicit in it.

"How can general education be so adapted to different ages and, above all, differing abilities and outlooks, that it can appeal deeply to each, yet remain in goal and essential teaching the same for all? The answer to that question, it seems not too much to say, is the key to anything like complete democracy."

* * *

"The education which seeks to promote active, responsible, and intelligent citizenship is ordinarily general rather than special education."

* * *

"Education is not complete without moral guidance and moral wisdom may be obtained from our religious heritage."

* * *

"We are at a turning point indeed in human affairs though we can do no more than guess what vectors may be needed to describe our spin."

* * *

"General education is the sole means by which communities can protect themselves from the ill effects of overrapid change."

* * *

"... all men are neighbors now."

General Education in a Free Society

"General education! What's that?" may be the comment of some who open the Harvard committee report entitled *General Education in a Free Society*, recently off the Harvard University Press. President James Bryant Conant points out however, that "general education" was purposely used instead of "liberal education" and asserted in an early report to the Board of Overseers that "the most important aspect of this whole matter is the general education of the great majority of each generation—not the comparatively small minority who attend our 4-year colleges." Following are a few brief excerpts from the report:

President Conant comments in his introduction that: "... the document represents a unanimity of opinion not based on compromise between divergent views. To one who has listened for years with considerable dismay to the educators and schoolmen belaboring the 'professors' and vice versa, this unanimity seems like the dawn of a welcome day.

"Neither the mere acquisition of information nor the development of special skills and talents can give the broad

basis of understanding which is essential if our civilization is to be preserved."

"Unless the educational process includes at each level of maturity some continuing contact with those fields in which value judgments are of prime importance, it must fall far short of the ideal. The student in high school, in college and in graduate school must be concerned, in part at least, with the words 'right' and 'wrong' in both the ethical and the mathematical sense. Unless he feels the import of those general ideas and aspirations which have been a deep moving force in the lives of men, he runs the risk of partial blindness."

Quotations from other parts of the book are:

The theme dominant in the book are the words President Conant used to the Board of Overseers in 1943 in describing the purpose in appointing the Harvard committee—"The primary concern of American education today is not the development of the appreciation of the 'good life' in young gentlemen born to the purple. It is the infu-

Library Service

To Develop Audio-Visual Programs

The public schools of Virginia are in a position to develop strong audio-visual programs, according to announcement by the State Board of Education, which points to a recent appropriation by the General Assembly of approximately \$1,112,000, plus \$100,000 for the production of films of distinctive natural resources and historic sites throughout the Commonwealth.

Authorized details of the program have been reported by the Board's director of school libraries and textbooks, who states that the funds appropriated are to be used for the purchase of maps, globes, charts, slides, films, projectors, and other teaching aids. It is understood that a major portion of the funds will be used for the purchase of films and film equipment.

Films are already made available to the public schools of Virginia by the State Board of Education through a central film bureau with regional and local branches.

Collection of Public Library Data

A Nation-wide collection of basic public library data is now under way by the Library Service Division, U. S. Office of Education, designed to include all public libraries and to cover the 1945 fiscal year.

The present collection of public library statistics is the second in a new series of comprehensive surveys begun in 1938-39 by the Division in an attempt to secure a detailed report on size, support, and service from every public library in the United States, regardless of size. The responsibility of the Office for the collection and publication of public library data is not new. Beginning in 1875, the Office has collected periodically, statistics from selected public libraries along with similar data from society, school, and college libraries. Such statistics have been published in various forms by the Office covering the years 1875, 1884-85, 1891, 1896, 1900, 1903, 1908, 1913, 1923, and 1929.

Present plans of the Division include a series of periodic studies of specific

types of libraries, including the collection and publication of basic data from school, college, and university libraries, as well as from public libraries. Carrying into effect this new program, the Office has published *Public Library Statistics, 1938-39* (Bulletin 1942, No. 4) and *College and University Library Statistics, 1939-40* (Biennial Survey of Education, 1938-40, Vol. II, Chap. VI). Now in press and due to appear shortly is the publication, *Public School Library Statistics, 1941-42*.

Division of Libraries Established

The enactment of legislation combining the various library activities of the State of New Jersey into a Division of Libraries of the State Department of Education under a qualified director is reported by the New Jersey Library Association in a recent *News Letter* as an outstanding result of its efforts during the past year.

According to the president of the Association, this legislation serves to recognize the public library as an educational institution with the need for professional qualifications in those who hold responsible library positions.

The legislative committee of the New Jersey Library Association, in its annual report, indicates that the new legislation may offer an approach to State certification of librarians, designed to strengthen their position in the public interest.

What American Boys and Girls Like

American boys and girls seek humor, adventure, and imagination in their reading, according to the American Library Association, which has completed a survey among representative school and public librarians to ascertain which children's books published in the last 5 years are most popular with youth.

The results of the survey indicate that youngsters still prefer good stories, regardless of the quality of writing. They like animal stories, books based on family life, and adventures of everyday boys and girls in America, with

the scene laid in either the past or present. Books with a foreign setting do not appear to be a first choice with children. Many libraries report that first-hand reports from war correspondents are more popular with young readers than war books written especially for them.

The A. L. A. survey indicates further that children do not demand books right from the press. Their reading choices appear to be influenced by personal recommendations either from librarians or from other boys and girls. An author's popularity among boys and girls, once established, is said to last for some time, and some writers develop devoted followings of young readers who favor immediately any titles written by them.

"All Hands" Made Available

Librarians and teachers may be interested to know that *All Hands*, the Navy's general service publication, has been made available to the public at large. It is a monthly publication, fully illustrated, and covers subjects of general naval interest.

The response from copies of *All Hands* sent home by naval personnel has led the Navy Department to feel that this periodical may be of considerable interest to students and school libraries.

All Hands may be secured from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C., at a price of 20 cents per copy, or \$2 a year by subscription.

Conferences for Extended School Service

The needs in extended school services are as varied as the children served. Thus the training needs of teachers are equally varied. To meet some of these needs in Alabama, a series of 2-week training conferences are being held. They are centered around special problems, and a small group of teachers are elected to attend.

Late last year, a general plan for the special conferences was worked out for the local supervisor, State supervisor, and the nursery school staffs of the

State colleges in a joint meeting. Recommendations had been sent in from teachers listing their specific needs in training. These recommendations were used in evolving the plan and determining which type of special conference would be held first. The opening conference was held at Alabama Polytechnic Institute. Attendance was limited to 15 and it was an orientation course for new nursery school teachers. Teachers who had had no previous training in nursery education were invited. The objectives of this conference were to develop with the group the purposes and philosophy of nursery education; to analyze teaching situations in nursery education; to gain some experience with play, art, and music media in nursery schools; and to observe in a well-planned nursery school.

The second conference, held at the University of Alabama, was centered around the problems of the head teachers, and only head teachers were invited. The objectives of this conference were to review the purposes of nursery-school education, discuss scheduling and program planning, suggest some aids in personnel and general management, do a job analysis, and meet special problems of individuals.

A third conference, held at Alabama College, took the form of a workshop. Teachers of nursery-school children were invited to attend. The college nursery school was at the disposal of the teachers under the guidance of the nursery-school director. The problems for this conference centered around room arrangement, care and arrangement of equipment, nutrition, parent contacts, health care, etc. The teachers were responsible for complete management of the nursery school under the guidance of the college director.

Two head teachers' conferences were held—one at the University of Alabama, attended by white teachers, and another at the State Teachers College at Montgomery, attended by Negro teachers. A similar plan as described above was used at these conferences.

Another conference centering around nursery-school methods, with particular help on activities and fundamental background of child development, was held at the University of Alabama. Teachers with limited training were

invited. A workshop built entirely on a problem basis was conducted at the State Teachers College at Montgomery.

It is planned that two or more conferences will be held this fall and several in the winter terms. These will center around interests as they develop in the field such as music, arts, special problems of the school-age group, the 5-year-olds, parent education, nutrition, and care and repair of equipment. From time to time there will be orientation workshops for new teachers and head teachers' conferences.

"It is too early to evaluate this type of plan. We have tried large conferences and were not satisfied with the results. Small conferences built on special interests more nearly carry out the philosophy which we are trying to build," stated Lula Palmer of the Alabama State Department of Education, who gave the above report on the conferences.

Nutrition Workshop

Participants in the nutrition workshop held during the past summer at the Central Washington College of Education, Ellensburg, Wash., and co-sponsored by the State department of public instruction and the college, were convinced that the elementary school must take the primary responsibility for strengthening and improving health habits, according to a report from the workshop.

Demonstration teaching in the second and fourth grades each morning gave concrete evidence that children in these grades, if given opportunity, can acquire and apply both the concepts and attitudes necessary for healthful food habits. It is at the elementary level that children are establishing health habits. By the time they reach the junior high school their habits of living are established to the extent that it is difficult to change them. Therefore, it is in the elementary school that nutrition education can best function.

The college and elementary teachers, supervisors and administrators, health workers and nutritionists present agreed on the following ways of enriching health teaching.

1. The study of food and its relation to health should be a part of school

living and included in social studies, science and arithmetic work, and especially in the selection of food in the lunchroom.

2. Kits of teaching aids should be made available to superintendents for use in the elementary schools; these packets to include general materials for the teachers and additional packets for the children at the primary, intermediate, and upper-grade levels.

3. Nutrition should become an important part of the in-service training made available to teachers. School systems should be encouraged to offer short periods of intensive study and conferences where teachers may receive the help of specialists both in nutrition and elementary school procedures.

4. Nutrition should be an essential part of the required teacher-education curriculum. This curriculum should stress means of applying the knowledge and including such experiences as will make clear the importance of good food selection in child health.

5. The nutrition program should be based on the needs of the school as shown by physical examinations, observation, and other screening tests by teachers and nurses, diet records, and other health records. A school health council to consider these needs and plan ways of meeting them most effectively may well include an administrator, members of the teaching staff, a doctor and/or nurse, a lunchroom manager or cook, the custodian, and student representatives.

6. Instructional aids should be analyzed by each teacher for the specific learnings intended. After such aids have been employed for specific emphasis and followed by checks to show their value in relation to the purpose intended, the usefulness of these aids and suggestions for additional needed materials should be made known to those who produce them.

7. Parent participation is essential in the school health program to build the right attitudes and improve the health of the community. When parents and teachers plan together and realize that they are working toward the same goals the effectiveness is more than doubled. Newer concepts which the school presents and established habits in the family must be reconciled if good is to result.

In-Service Training for the Federal Prison System

by Homer T. Rosenberger, Supervisor of Training, Bureau of Prisons, Department of Justice

DURING the past 15 years many persons skilled in the techniques of educational organization have been called on by government and private industry to organize training programs for employed personnel. This emphasis on "in-service training" has presented to educators new and challenging opportunities.

Numerous units of government and industry are engaged in highly complex programs which may vary from year to year. In view of this fact, it has been recognized that general education and preservice technical training must be supplemented. It has also been recognized that a program of in-service training which acquaints the employee with the policies and procedures of the employing organization usually "pays its way."

Following is a description of the in-service training program of one Federal Agency, the Bureau of Prisons:

☆

In the field of penology the prison system is responsible for receiving prisoners committed by the courts. Through planned methods of "treatment" it is charged with the duty of returning such persons to the communities where they belong as self-supporting, respectable citizens, insofar as that is possible.

It is important in prison work to know how to meet and deal with persons. The individual who cannot do that will not make a good prison employee. The employee who enters the prison business finds it different from any other kind of undertaking, because experience in this field can be acquired only through on-the-job training. Some persons enter this work with the background of professional or technical experience necessary in certain phases of the treatment program, but regardless of their previous experience they must all learn the prison business.

The "attitude" of the employee who is to be responsible for the control and supervision of the inmates of an institution is important. In view of these cir-

cumstances the objective for which we strive in giving the new employee experience is to offer him an opportunity (1) to learn the general principles of institution management, (2) to participate in the technical procedure used by the six services—administrative, advisory, culinary, custodial, farm, and mechanical—operating in the institution, (3) to become acquainted with the policies developed for the control of the prison, and (4) to demonstrate that he is capable of maintaining the proper attitude of dignity, consideration, and tact in dealing with prisoners.

Generally speaking, the conventional approach to the training of prison employees is to offer lectures dealing with institutional management, classification of prisoners, and discussions upon psychology, education of adults, and the like. It is not often that a sufficiently consistent attempt is made to improve the "attitude" of a new employee, but unless the man who is to be responsible for the control and supervision of inmates of an institution either has or acquires the right attitude toward this type of work, training will be ineffective.

Some administrators believe it is desirable to train each group of employees to do only the particular part of the work with which they are identified. Under that method one group is concerned only with clerical work, another with the classification of prisoners, others with educational activities, parole, library facilities, and the like, while the majority of the employees are "guards." Then there is little opportunity for the exchange of personnel and each group establishes its own little island of prestige, frequently neither understanding the responsibilities and activities of the organization as a whole, nor exhibiting interest in things with which they are not directly identified.

In the prison business a cohesive, well organized, cooperative group of employees is necessary. A good training program must break down artificial bar-

riers, make it impossible to create islands of prestige, and direct the efforts of all employees toward the accomplishment of the common objective for which the service exists.

Supervision and Training of Prisoners is Primary Task

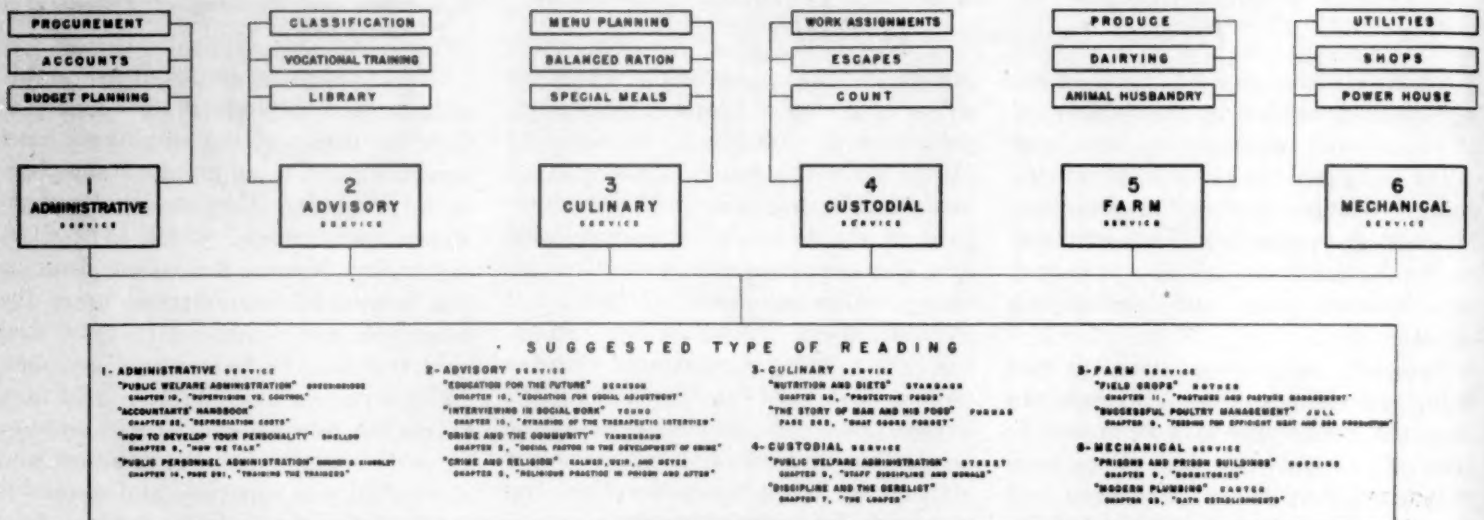
One of the peculiarities of prison administration throughout the country is that too many of the employees have been relegated to an unimportant place in the program. They are usually given the title of "guard," which in itself is significant, because it does not describe the responsibilities imposed upon the employee, and is generally associated with the idea of a "watchman" or a man "with a gun on his shoulder." In fact, this is the group of employees who come in daily contact with the prisoner, and their ability to supervise and counsel is an important factor in the success of the "treatment program," while their custodial duties are incidental although important. How could any business dealing in human relations be successful if only a few of the employees understood what it was expected they would accomplish? There is no such position as "guard" in the Federal Prison System, and in the leveling off process, necessary for the establishment of a career service, the recruitment of all personnel begins through the appointment of "correctional officers" at a common entrance grade, to be followed by training, placement, and promotion according to the demonstrated ability of the individual.

While it is true that prison employees must learn how to use firearms and must engage in a certain measure of physical training planned to give them a knowledge of defensive tactics, these undertakings are nothing more than incidental to their primary task which is the supervision and training of prisoners. The real objective is to help the new employee acquire the right "attitude," and to accomplish that end, while you help him learn about his daily work, you must give him the right perspective, and teach him what is expected of him as a prison employee by showing him how an institution functions.

The first step in the training of employees in the Federal Prison System is to acquaint them with the responsibilities and activities of the various groups engaged in prison management. The

TECHNICAL COURSE

IN-SERVICE TRAINING FEDERAL PRISON SYSTEM



While the above chart shows the Technical Course, similar charts used in the in-service training show also the basic course and the orientation course.

related functions of a prison are grouped as "services." As indicated previously, these services are referred to as the administrative, advisory, culinary, custodial, farm, and mechanical. While the new trainee is not assigned to the performance of actual duties, during the first week following his entry on duty he participates in the Orientation Course, to give him an opportunity to learn something about the environment in which he is to work and to become acquainted with the personnel responsible for the various services. This introduction to prison work is accomplished through lectures, tours of inspection, and daily group conferences, but no attempt is made at this stage of the training to outline studies or to assign the trainee to specific tasks. This course lasts 1 week.

Basic Course

The next step in the training is known as the Basic Course, in which the trainee acquires general experience in prison work. Lectures have a very small place in this course which consists in the main of on-the-job training, during which the functions of each of the six "services" represented in prison management are demonstrated. The trainees are given pamphlets descriptive of the work and they are assigned progressively to an instructor who explains and illustrates the task to be performed. When the trainee

understands what is expected of him and has demonstrated on the job that he knows how to do that portion of the work to which he is assigned, he is for a short time given full responsibility for the performance of the job, with the instructor observing, counseling, and assisting him if needed.

When he has acquired a fair working knowledge of the job on which the training is given, the instructor submits a report using the standard efficiency rating form on which certain elements are indicated as having application to the work of the trainee. Definitions have been developed for each of the elements so selected in order that the report of the instructors may have some degree of uniformity. The trainee himself is expected to submit a narrative report explaining what he has accomplished and commenting upon the things he has observed in the course of his instruction. These two reports, prepared independently, go to the training officer.

The plan developed for on-the-job instruction in the Basic Course is intended to give the trainee information regarding the work to be performed by the prisoner, so that he will be better prepared to exercise supervision and will have more assurance when assigned to a job. After the instructor has coached the trainee and given him a background upon which to work, the

trend of instruction is to develop his ability to supervise the prisoners who actually perform the work on the job. This plan is followed throughout the Basic Course until the entire field of prison work, as indicated by services, has been completed. At the end of the course the trainee will have worked under two instructors in each of the 6 services, and these 12 instructors will have reported on his work as a trainee. The trainee himself will have submitted 12 narrative reports respecting the jobs he has completed.

Development of Performance Tests

In prison work many different trades and professions are needed. Forty-five of these are recognized as essential to the accomplishment of many functions of prison administration. One feature of the Basic Course is the development of performance tests. When the trainee reaches the particular job for which he is potentially best qualified he is given a performance test, which is an actual demonstration of his ability to perform the task which would ordinarily be done by trained and experienced prisoner workers. Each performance test must be completed within a period of approximately 2 hours, and consists of the assignment of definite tasks which have been selected as best suited to demonstrate the ability of the trainee in professional, clerical, or mechanical work.

The standard efficiency rating sheet is used by the instructor in rating the trainee in accordance with definitions developed by the Bureau of Prisons. If he is successful in passing the performance test he is then assigned for 2 weeks to work in that particular service, and during that interval he ceases to function as a trainee, but is given regular duty assignments just as though he were a new employee assigned to that activity.

The Orientation Course requires 1 week for completion; the Basic Course, 14 weeks, including 2 weeks work assignment following the performance test. At the end of the 15 week interval, the employee is assigned to one of the six services representing the functions into which prison work is divided.

By that time, the trainee has had opportunity to learn how all the different departments of the institution function. Under the leadership of various instructors he has demonstrated his ability to supervise and deal with prisoner workers. Throughout the course of this training, emphasis has been placed on the maintenance of a proper attitude. No one group of employees can accomplish satisfactory results if they work independently. Responsible employees must know something about the problems and the methods pursued by other groups of employees. Promotion and advancement are earned in the service according to demonstrated ability to deal with prisoners and to cooperate with other units engaged in the administration of the prison.

Opportunity for Advancement

The Federal Prison System is not a place in which to "vegetate." An employee has opportunity for advancement, if he is interested and works upon his own initiative to improve these opportunities, and if through cooperation with others he renders substantial aid in the development of the treatment program. For the employees who have completed the Orientation and Basic Courses the Technical Course is developed. This consists of specialized instruction having application to the different fields of prison work. For example, the Technical Course developed for the employee in the Mechanical Service deals with the refinements of instruction and supervision in connec-

tion with mechanical trades and similar activities, and in its application to the treatment program deals with specialization in the education of adults, classification of prisoners, library science, and the like.

The Technical Course does not undertake to teach any employee a profession or trade. Instead it is developed for the purpose of showing an employee how best to utilize his profession or trade in the management and guidance

of prisoner workers. As an incentive to employees who are interested but who do not have the professional knowledge or the trade skill, arrangements have been made with various colleges throughout the country to offer specialized courses. The employee who is able to do so may attend these courses. The employee who must supplement his knowledge while on the job has opportunity to participate in correspondence and extension courses.

New York City Public Schools

"Character training is the chief aim of New York City's public schools." With this statement, John E. Wade, superintendent of schools in New York City, opens his annual report for the past school year titled, *All the Children*. Description and activity photographs are utilized in about equal proportion to convey an understanding of the aims and achievements of the schools during the year. The following information is taken from the report:

Through retention of teaching positions in the face of small register and by appointment of additional teachers, an improved educational program provides for:

A further reduction in the number of oversize classes.

Additional small-size classes for slow learners and additional special classes for maladjusted children.

More remedial instruction.

More guidance service.

Increased services for physically and mentally handicapped children.

More playgrounds and recreational facilities.

Added provisions for extracurricular activities.

An enlarged program of health service.

Increased opportunities for adult education.

School-Home-Community Program

During the school year, supervisors and teachers have recognized the fact that they have a larger responsibility, one which extends beyond the immediate school environment. They are aware of the fact that their function includes an intimate relationship with the community which the school serves.

Their ability to interpret the school-community relationships is quite as important in the development of the school program as their knowledge of school administration and the techniques of classroom instruction.

The following steps have been taken by supervisors in organizing this school-home-community cooperative program:

An over-all picture of the community of the school—health, safety, housing, and economic status—has been obtained.

A study of the educational, religious, recreational, and leisure-time activities has been made.

A survey of the deficiencies and lacks and the factors which mitigate against the community for normal, satisfying living has been undertaken.

A knowledge of the resources of the functioning social agencies—those which function on a city-wide basis and those which function to serve the immediate neighborhood of the school—has been secured.

Identification with the established local councils of social agencies, sponsored by the Welfare Council of New York City.

Participation in the activities of the coordinating councils of the police precincts.

Code of Behavior

The creation and adoption of a code of behavior by 83 junior high schools constitute a significant experiment in student democracy. School assemblies, classrooms, and student forums, were devoted to full and detailed discussion of the various articles in the Code and their implications for individual behavior.

U. S. Government Announces

Orders for the publications listed on this page should be addressed as follows: Requests for cost publications should be sent to the Superintendent of Documents, Government Printing Office, Washington 25, D. C., enclosing remittance (check or money order) at the time of ordering. Free publications should be ordered directly from the agency issuing them.

New U. S. Office of Education Publications

Family Contributions to War and Post-War Morale. Washington, U. S. Government Printing Office, 1945. 5 cents each.

No. 1. Suggestions for Using the Series. No. 2. Home on Furlough. No. 3. They Also Serve. No. 4. We Carry On. No. 5. First Days at Home. No. 6. Catching Up With the Children.

Statistics of City School Systems, 1939-40 and 1941-42. By Lester B. Herlihy and Walter S. Deffenbaugh. Washington, U. S. Government Printing Office, 1945. 103 p., illus. (Biennial Survey of Education in the United States, 1938-40 and 1940-42, Volume II, Chapter VII.) 20 cents.

Data on enrollment, school attendance, length of school year and days attended, pupil-teacher ratio, supervisory and teaching staff, salaries, sources of revenue, distribution of city school expenditures, expenditures per pupil in average daily attendance, school buildings and property investments, city school district bonded indebtedness, night schools, and summer schools.

Statistics of Nonpublic Elementary and Secondary Schools, 1940-41. By Lester B. Herlihy. Washington, U. S. Government Printing Office, 1945. 28 p. (Biennial Survey of Education in the United States, 1940-42, Volume II, Chapter IX.) 10 cents.

Data on approximately 70 percent of all private schools in the United States which are below the college level.

Training School Bus Drivers. Washington, U. S. Government Printing Office, 1945. 162 p., illus. (Vocational Division Bulletin No. 233.) 30 cents.

General considerations relating to the training of drivers and the operation of driver-training courses, and a suggested instructional

program prepared by the American Automobile Association and the Trade and Industrial Education Service of the Vocational Division of the U. S. Office of Education.

The Place of Visiting Teacher Services in the School Program. By Katherine M. Cook, Washington, U. S. Government Printing Office, 1945. 46 p. (Bulletin 1945, No. 6.) 10 cents.

Develops briefly the objectives of and need for pupil personnel services and the place of visiting teacher work in school programs; includes a brief historical sketch of the development of visiting teacher services in school systems; gives basic information on such services in the school systems of cities of 10,000 and above in population in the United States; and summarizes certain conclusions which seem justified by the information collected.

New Publications of Other Agencies

U. S. Civil Service Commission. Library. *Arrangement of Public Administration Materials.* Washington, U. S. Government Printing Office, 1945. 120 p. 5 cents.

A scheme of classification developed to meet the special needs of the U. S. Civil Service Commission.

U. S. Department of Agriculture. Farm Credit Administration. Cooperative Research and Service Division. *Cooperative Possibilities in Freezing Fruits and Vegetables.* By Anne L. Gessner. Kansas City, Mo., Farm Credit Administration, 1945. Processed. 60 p. Free as long as supply lasts from Director of Information and Extension, Farm Credit Administration, Kansas City 8, Mo. (Miscellaneous Report No. 84.)

Discusses the technical problems involved in freezing foodstuffs, describes methods, and presents facts regarding the extent of the industry.

U. S. Department of Commerce. Bureau of the Census. *City Finances: 1943. (Cities Having Populations Over 25,000) Volume 3: Statistical Compendium.* Washington, U. S. Government Printing Office, 1945. Processed. 224 p.

Expenditure for schools and public libraries are included in these summaries. Previous

1943 reports in this series are: Volume 1, *Individual City Reports* (for each city having a population over 250,000); Volume 2, *Topical Reports* (on debt and expenditure).

U. S. Department of Labor. Bureau of Labor Statistics. *Occupational Data for the Counselors; A Handbook of Census Information Selected for Use in Guidance.* Prepared in cooperation with the U. S. Office of Education. Washington, U. S. Government Printing Office, 1945. 36 p. 10 cents.

A selection, summarization, and interpretation of material from the mass of census statistics, to supply a need of counselors and others who are helping young people and veterans to choose a vocation.

U. S. Department of Labor. Women's Bureau. *Negro Women War Workers.* Washington, U. S. Government Printing Office, 1945. (Bulletin 205) 23 p. 10 cents.

A story of the ways in which Negro women helped to bridge the manpower gap during the war period.

U. S. Department of State. *Papers Relating to the Foreign Relations of the United States: 1930.* Washington, U. S. Government Printing Office, 1945. 3 vols. Volume 1 (Publication 2229), \$1.75, buckram; volume 2 (Publication 2330), \$2.25, buckram; volume 3 (Publication 2319), \$2.25, buckram.

Contains the diplomatic correspondence carried on with foreign nations during the year 1930. In volume 1, for instance, are the telegrams and reports on the London Naval Conference together with the text of the Treaty for the Limitation and Reduction of Naval Armament, signed in London, April 22, 1930.

U. S. Federal Security Agency. Office of Community War Services. Social Protection Division. *Danger Ahead.* Issued in cooperation with Surgeon General, U. S. Army, and Bureau of Medicine and Surgery, U. S. Navy. Washington, U. S. Government Printing Office, 1945. 4 p. folder. Free from Director, Social Protection Division, Office of Community War Services, Federal Security Agency, Washington 25, D. C., or the nearest Social Protection Regional Office.

Folder calls attention to the need for continued social protection and presents a concise program for law enforcement for health, for social treatment, and for education.